

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF VIRGINIA
ALEXANDRIA DIVISION

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 UNITED STATES, et al., : Civil Action No.:
 : 1:23-cv-108
 Plaintiffs, :
 versus : Thursday, September 12, 2024
 : Alexandria, Virginia
 GOOGLE LLC, : Day 4 p.m.
 : Pages 1-179
 Defendant. :
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The above-entitled bench trial was heard before the
 Honorable Leonie M. Brinkema, United States District Judge.
 This proceeding commenced at 9:00 a.m.

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Cross-Examination - J. Dederick

1 THE COURT: All right.

2 Ms. Dunn?

3 MS. DUNN: Thank you, Your Honor.

4 CROSS-EXAMINATION (Resumed)

5 BY MS. DUNN:

6 Q Mr. Dederick, right before the break you had testified
7 that you listened to the earnings announcement on August 8
8 of 2024.

9 Do you recall that?

10 A Yes.

11 Q Okay. And then I had asked you whether the increase in
12 consumer time spent on connected TV and digital audio was
13 due to the global pandemic, and you said you couldn't
14 remember whether that was said on the earnings call.

15 Do you recall that?

16 A What I remember saying is I don't -- I don't remember
17 the words on that earnings call, you know, from a month ago.

18 Q Okay. I'd like to refresh your recollection. If you
19 would turn to the tab in your binder. I think you were at
20 it before. It's the one labeled 20240808.

21 Do you have that in front of you, Mr. Dederick?

22 A Yes.

23 Q Okay. Can you please turn to page 6 and look at the
24 top of the page, first paragraph.

25 A First paragraph?

Cross-Examination - J. Dederick

1 Q Yes. And please read the first paragraph to yourself.

2 You got it?

3 A Uh-huh.

4 Q Does reading that paragraph refresh your recollection
5 that your CEO told investors and analysts that the massive
6 shift over the last four years in terms of where consumers
7 are spending their digital time was the global pandemic?

8 A It does. It's helpful to read through this. That
9 shift --

10 Q My question is --

11 A -- was happening before the pandemic. The pandemic
12 accelerated it.

13 THE COURT: The question -- wait. The question
14 was simply does it refresh your memory? The answer would be
15 yes or no.

16 THE WITNESS: Yes.

17 THE COURT: Okay.

18 BY MS. DUNN

19 Q And yes or no? Did your CEO say that?

20 A This appears to be the earning transcript, so yes.

21 Q And do you now also recall that your CEO said that what
22 the pandemic also reversed was that consumers used to spend
23 60 percent of their time --

24 THE COURT: Again, Ms. Dunn, we're going to get an
25 objection, and I don't want this to continue. Just ask the

Cross-Examination - J. Dederick

1 question first.

2 MS. DUNN: I understand, Your Honor, and I
3 apologize. I'm trying to do this quickly, and it's
4 challenging.

5 Okay.

6 BY MS. DUNN:

7 Q Do you recall, having listened to this earnings
8 announcement, it was announced to investors and analysts
9 that consumers used to spend over 60 percent of their time
10 within walled gardens and 40 percent on the open internet
11 but that that trend was completely reversed?

12 MR. GUARNERA: Your Honor, we object. It's
13 hearsay.

14 THE COURT: More than that, do you know from your
15 position at the company whether that kind of a change has
16 occurred?

17 And the answer is yes or no. You know or you
18 don't know.

19 THE WITNESS: Yes, I do know.

20 THE COURT: Okay.

21 MS. DUNN: Okay.

22 THE COURT: Why don't you get away from this
23 presentation and just ask the questions directly.

24 MS. DUNN: I will do so, Your Honor.

25 BY MS. DUNN:

Cross-Examination - J. Dederick

1 Q Mr. Dederick --

2 MS. DUNN: With the Court's indulgence, Your
3 Honor, it is -- the question is in part about what the
4 company is communicating to the investment community about
5 the market and to analysts. If -- I can say "do you
6 remember" --

7 THE COURT: I don't think it makes any difference
8 who the audience is. All right?

9 MS. DUNN: Okay.

10 BY MS. DUNN:

11 Q Mr. Dederick, are you -- in your position, are you
12 aware that The Trade Desk view is that Google's interest in
13 the network business is shrinking?

14 A We don't know what's happening inside of Google's
15 walls.

16 THE COURT: That's perfect. Just stop. That's a
17 good answer.

18 Go ahead.

19 BY MS. DUNN:

20 Q All right. And are you aware and have you ever heard
21 it communicated at The Trade Desk that Google's downgrade on
22 their focus on the open internet creates an opportunity for
23 The Trade Desk?

24 A Will you repeat the beginning of your question.

25 Q Yes.

Cross-Examination - J. Dederick

1 Have you ever heard it communicated by anyone at
2 The Trade Desk that Google's downgrade of their focus on the
3 open internet creates an opportunity for The Trade Desk?

4 A Yes. There's a lot of context to that.

5 Q Okay. But you've heard that said?

6 A Variations on that idea.

7 Q Okay. And have you heard your CEO say that?

8 A Again, variations on that idea, yes.

9 Q Okay. Okay. And have you ever heard it said by anyone
10 at The Trade Desk that, because of the increase in
11 popularity of CTV and digital audio, The Trade Desk is
12 solidifying its position as the default DSP of the open
13 internet?

14 MR. GUARNERA: Your Honor, objection.

15 THE COURT: I don't know why this is important to
16 the case. I'm going to sustain the objection.

17 MS. DUNN: Okay. To answer the Court's question,
18 it goes to market definition; but I'm happy to move on.

19 BY MS. DUNN:

20 Q Okay. Mr. Dederick, have you ever -- are you aware of
21 statements by The Trade Desk about Amazon -- public
22 statements by The Trade Desk about Amazon?

23 A That's very broad. You -- will you give me more of
24 what you're referring to?

25 Q Sure. Have you ever heard --

Cross-Examination - J. Dederick

1 THE COURT: Ms. Dunn, that's really a problematic
2 question that's going to just draw one objection after
3 another. "Have you heard" invites a hearsay objection at
4 the very least. All right.

5 MS. DUNN: Okay.

6 THE COURT: But in this man's position, he could
7 be -- I'm sure, of his own knowledge, talk about Amazon.
8 All right?

9 BY MS. DUNN

10 Q Do you view Amazon to be a competitor to The Trade
11 Desk?

12 A As Amazon operates a DSP, we compete with Amazon's DSP.

13 Q Okay. And do you view Amazon to have a conflict of
14 interest?

15 A Yes.

16 Q Okay. And what's the conflict of interest that you
17 view Amazon to have?

18 A Well, there's a lot of examples in our industry of a
19 content owner then trying to introduce a demand-side
20 platform. A demand-side platform, the idea is you're
21 representing the interests of your buyers. If you are going
22 to be incentivized to direct spend toward your owned and
23 operated, more profitable areas, we view that as a conflict
24 of interest.

25 Q Okay. And even though you view Amazon to have a

Cross-Examination - J. Dederick

1 conflict of interest, your testimony is that you compete
2 with Amazon, correct?

3 A We compete with Amazon's DSP.

4 Q And that's true even though, as you testified, you
5 believe Amazon has a conflict of interest?

6 A Yes.

7 Q Right. In other words, what you perceive to be a
8 conflict of interest is not standing in the way of
9 competition with Amazon?

10 A No, that's not what I said. Their conflict of interest
11 and the exclusive access that they offer to their inventory
12 is a challenge.

13 Q Who are the other companies that you believe have this
14 conflict of interest?

15 A At this point, there are no -- there really aren't
16 meaningful demand-side platforms other than those three.
17 But to -- so yeah, there aren't meaningful other demand-side
18 platforms at this point.

19 Q And when you say "those three," who are you talking
20 about?

21 A Amazon DSP, DV360, and The Trade Desk.

22 Q Okay. Do you view Microsoft to have a conflict of
23 interest?

24 MR. GUARNERA: Objection, Your Honor. Vague.

25 THE COURT: No, that's pretty straightforward.

Cross-Examination - J. Dederick

1 THE WITNESS: It's a lot -- we don't really
2 compete with Microsoft's DSP anymore. You don't see them
3 much.

4 BY MS. DUNN

5 Q Okay. So when Microsoft -- Microsoft did acquire a DSP
6 when it acquired Amazon. You're aware of that, right?

7 A Microsoft did not acquire Amazon.

8 Q Apologies to Microsoft and Amazon.

9 Microsoft has a DSP after it acquired Xandr.
10 You're aware of that, right?

11 A Yes.

12 Q And do you believe that Microsoft's acquisition of a
13 DSP created for them a conflict of interest?

14 A We had such little competition that it was hard to
15 assess how that product works. We really never came across
16 their positioning in market. So it's really hard for me to
17 comment.

18 Q Okay. So your view of whether a company has a conflict
19 of interest is based on your perception of your experience
20 with that company?

21 A My view of whether a company has a conflict of interest
22 is -- whether a demand-side platform is lying to its
23 advertisers when it says they want to represent their best
24 interests and place ads wherever it's best for the
25 advertiser.

Cross-Examination - J. Dederick

1 Q Okay. All right. So yesterday you recall that you
2 said The Trade Desk does not compete with Google, that the
3 companies do not compete. Do you remember saying that?

4 A Yes. I said The Trade Desk competes with DV360,
5 Google's DSP.

6 Q Right. But I just want to be clear. You're saying the
7 Trade Desk company does not compete against Google, the
8 company?

9 A No. We compete with their DSP. Obviously, there's a
10 much larger advertising ecosystem at play.

11 Q All right. And you also testified yesterday that The
12 Trade Desk does not compete with the Google display network
13 or Google Ads. Do you remember that?

14 A Yes.

15 Q Okay. I'll ask you to turn in your binder to DTX 122.
16 And I have only one question about this document.

17 I'm not seeking to admit it.

18 THE COURT: Okay. Hold on. Is there an
19 objection?

20 MR. GUARNERA: Your Honor, there is an objection.

21 THE COURT: Well, she's not admitting it; so it's
22 all right.

23 MS. DUNN: I'm not seeking to admit this document.

24 BY MS. DUNN

25 Q It's DTX 122, which would be in the very front of your

Cross-Examination - J. Dederick

1 binder.

2 A Okay.

3 Q Okay. Do you see that this is a document that is a
4 competitive intelligence document from The Trade Desk
5 evaluating competition with the Google display network?

6 A No.

7 Q Okay. If you look at the top of the document where it
8 says "Competitive Intel Framework," do you see that?

9 A I think there's a misunderstanding here. I mean --

10 THE COURT: No. The question that's on the floor
11 is do you see that heading? And the answer is yes or no.

12 THE WITNESS: Yes.

13 BY MS. DUNN

14 Q Okay. And do you see that under that heading,
15 "Competitive Intel Framework," it talks about the Google
16 Display Network?

17 A Those words are in this document.

18 Q Right. And then it goes on to talk about various
19 attributes of the Google Display Network, correct?

20 A It also talks about their ad exchange and their DSP --

21 Q Sir, that wasn't my question. My question is whether,
22 after competitive intelligence framework, it talks about GDN
23 and various attributes of the Google Display Network.

24 A Among other things, yes.

25 Q Okay. Mr. Dederick, have you in your position been

Cross-Examination - J. Dederick

1 part of discussions at The Trade Desk about the target
2 addressable market, also called TAM?

3 A That is very broad. There's a lot of different target
4 addressable markets; so we do talk about them frequently,
5 yes.

6 Q Okay. And you're involved in those discussions in your
7 position as CRO?

8 A There's thousands of people across The Trade Desk use
9 that frame frequently. So yes, I'm one of them.

10 Q And you're one of them, right? You just said that?

11 A Uh-huh.

12 Q All right. Are you -- in your position, are you aware
13 that The Trade Desk considers there to be a target
14 addressable market over \$200 billion?

15 A I don't know what you're referring to.

16 Q Okay. If you could turn in your binder to DTX 1398.

17 MS. DUNN: And, again, here I'm using to refresh
18 recollection; I'm not seeking to admit, Your Honor.

19 THE COURT: All right.

20 BY MS. DUNN

21 Q Mr. Dederick, is this a document that you recognize?

22 It is a -- it's an email chain with a deck from
23 November 2022, and it talks about The Trade Desk target
24 addressable market, and it has various other C-suite
25 executives on the communication.

Cross-Examination - J. Dederick

1 A No. I don't think I'm on this email.

2 Q Have you ever seen it before?

3 A Not that I recall.

4 Q Okay. If you'll direct your attention to page 9 of
5 this document.

6 Are you there?

7 A How do I know it's page 9?

8 Q There are page numbers at the bottom of the exhibit.

9 A I see them now. Thank you.

10 Okay.

11 Q And does looking at page 9 refresh your recollection
12 that The Trade Desk projects open web TAM, target
13 addressable market, to be over \$200 billion?

14 A You know, I just really don't -- I'm not familiar with
15 the context or the data that this document is pulled on. So
16 I see the numbers on the document. I would have to
17 understand where those numbers came from; so... I see those
18 numbers on this document.

19 Q Okay. So is it your testimony that that is not
20 something you've ever heard before?

21 A We've had so many conversations -- and, to me, this
22 really gets into the heart of the confusion. Ford Motor
23 Company and Delta --

24 Q That wasn't my question. My question was only --

25 A -- Air Lines both compete for my travel budgets, but I

Cross-Examination - J. Dederick

1 wouldn't call them competitors.

2 THE COURT: Wait. Excuse me. There's no question
3 pending. We're not going to have speeches. All right?

4 But, again, the questions are problematic.

5 Have you discussed TAMs during your work at your
6 company?

7 THE WITNESS: All the time.

8 THE COURT: All the time. All right.

9 And in those discussions, are you addressing the
10 projected revenue that may be generated from TAMs?

11 THE WITNESS: Yeah. There's many different TAMs.

12 THE COURT: All right. The answer is yes or no.

13 THE WITNESS: Yes. We are assessing how that may
14 or may not affect our company.

15 THE COURT: All right.

16 Go ahead.

17 BY MS. DUNN:

18 Q And what's -- when you say "there are many different
19 TAMs," is there a TAM for the global advertising market?

20 A Yes.

21 Q Okay. And what is that number?

22 A We refer to it as approaching a trillion-dollar
23 advertising market.

24 Q Okay. And the approaching-trillion-dollar advertising
25 market, that includes video display, social, digital

Cross-Examination - J. Dederick

1 out-of-home; is that correct?

2 A It's all advertising everywhere around the world.

3 Q Okay.

4 All right. Switching gears slightly, advertisers
5 have sort of a -- however much budget that they have, and
6 there are different platforms and channels that compete for
7 the overall ad budget of the advertiser?

8 A I wouldn't frame it that way.

9 Q Okay. I will direct your attention, then, to your
10 deposition.

11 THE COURT: I don't think we have that. Do we?
12 Wait. Wait. Maybe we do. Hold on.

13 MS. DUNN: Apologies, Your Honor. Okay.

14 THE COURT: Yep, I've got it.

15 BY MS. DUNN

16 Q Okay. So if you'll turn, sir, to page 220, line 17.

17 And you were asked the question, "To what extent
18 does The Trade Desk compete with ad networks like the Google
19 Display Network?"

20 And you said, "So the DSP category does not
21 include those ad networks. However, you know, of course,
22 there's a broader picture at play where an advertiser has
23 however much budget, and many different channels and
24 platforms will compete for the overall ad budget of the
25 advertiser.

Cross-Examination - J. Dederick

1 "And so to the extent that The Trade Desk wants to
2 compete for performance display dollars, unfortunately,
3 performance display dollars are almost entirely dominated by
4 AdWords or DV360."

5 Do you see that?

6 MR. GUARNERA: Your Honor, I object. I'm not sure
7 what the impeachment is based on.

8 THE COURT: I agree. Sustained. That wasn't --
9 that's not related to the question that was before it.

10 MS. DUNN: So the question was whether he views
11 that advertisers have however much budget, and many
12 different platforms and channels compete for the overall ad
13 budget of the advertiser.

14 THE COURT: I don't believe that was the question,
15 unless I'm missing things. All right?

16 So I'm sustaining the objection. Move this along.

17 BY MS. DUNN

18 Q All right. Okay. And, Mr. Dederick, when you pitch
19 against other companies in the market, The Trade Desk does
20 emphasize its ability to buy across channels, including both
21 display and connected TV, correct?

22 A We talk frequently about being able to buy across
23 multiple channels, yes.

24 Q And that's a pitch that you make when you go out into
25 the market and compete, correct?

Cross-Examination - J. Dederick

1 A That is how we talk about our company.

2 Q Right. All right. Can you look, please, in your book
3 at Defense Exhibit 319.

4 A Okay.

5 Q Okay. So this is email where you're cc'd. It's from
6 Tim Smith to multiple recipients at The Trade Desk. And the
7 subject line talks about an RFP. I'll keep the company name
8 confidential, but it's a very large company being discussed.
9 Do you see that?

10 A Yep, I do.

11 MS. DUNN: Your Honor, we move to admit DTX 319.

12 MR. GUARNERA: Your Honor, we object. That's
13 hearsay.

14 THE COURT: I don't think it's offered for the
15 truth of its contents. I'm going to allow it in. 319 is
16 in.

17 MS. DUNN: Thank you, Your Honor.

18 BY MS. DUNN:

19 Q All right, sir. If you'll direct your attention to
20 page 11, do you see the executive summary?

21 A Yes.

22 Q Okay. And do you see where it says, "The Trade Desk
23 has become the fastest-growing demand-side platform in the
24 industry by offering advertisers best-in-class technology to
25 manage cross-channel advertising campaigns in display,

Cross-Examination - J. Dederick

1 video, social, and mobile"?

2 Do you see that?

3 A Will you tell me where that is written.

4 Q It's in the -- it's highlighted on your screen, to make
5 life just a little easier.

6 A I just want to read the full paragraph, please.

7 Okay. I do see the words that you've highlighted.

8 Q Okay. And so you can agree, looking at this document
9 which is discussing a pitch to a very large company and
10 selling itself, one of the things that The Trade Desk is
11 emphasizing is its ability to buy across multiple channels,
12 including display, video, mobile, and also it refers in this
13 paragraph to connected TV?

14 A Yes, we buy across those channels.

15 Q All right. And also in the same document at page 11,
16 there's a mention of The Trade Desk scale. Do you see that?

17 Do you see the sentence that -- where it says --
18 I'm going to skip the company name. But "We have been able
19 to drive massive success in the United States and Canada for
20 paid media across display, video, mobile, cross-device, and
21 connected TV."

22 Do you see that?

23 A I see those words.

24 Q Right. And then you also see it says, "Our ability to
25 buy inventory across all channels at scale and all over the

Cross-Examination - J. Dederick

1 globe positions us as a leader in the space and an ideal DSP
2 for large global brands."

3 Do you see that?

4 A I see those words, yeah, with the context of the pitch
5 document.

6 Q And so one of the things that you emphasize in your
7 pitch document is the scale of your company, correct?

8 A Yes. In 2016 this appears to be a part of a pitch
9 document.

10 THE COURT: All right. A housekeeping matter.
11 The name of the company is mentioned in here. Does that
12 need to be redacted before this goes out on a public
13 website?

14 THE WITNESS: Yes. I mean --

15 MS. DUNN: This has been agreed to. I just wasn't
16 going to mention it publicly, but there was no objection.

17 THE COURT: No, but my point is Exhibit 319,
18 although it may be going in, it does reference the client.

19 MS. PREWITT: There will be no objection, Your
20 Honor.

21 THE COURT: So what I'll need to hear from -- and
22 just speak up loudly, ma'am -- from the counsel.

23 MS. PREWITT: On behalf of The Trade Desk,
24 Elizabeth Prewitt. We have no objection, Your Honor.

25 THE COURT: No objection to what? Being redacted

Cross-Examination - J. Dederick

1 or going out straight?

2 MS. PREWITT: Going out.

3 THE WITNESS: Well, this has confidential
4 information in it.

5 THE COURT: Well, wait a minute. Your attorney
6 and you are saying two different things.

7 MS. PREWITT: Can we confer with counsel?

8 THE COURT: You have to do it quickly. This trial
9 needs to get moving. Get with Ms. Dunn right now. All
10 right.

11 (Counsel confer.)

12 MS. DUNN: We're happy to redact this in the
13 interest of time.

14 THE COURT: All right. So the name of the clients
15 will be out?

16 MS. DUNN: Yes.

17 THE WITNESS: There's pricing information in here.

18 MS. DUNN: Your Honor, the pricing information
19 that the witness is referring to is already redacted; so...

20 THE COURT: My concern is it's not from the
21 edition I have. So as long as whatever is going out
22 publicly has been taken care of, I strongly recommend,
23 before you put it on the website tonight, that you have met
24 with counsel and you're sure the right thing is going out.
25 All right?

Cross-Examination - J. Dederick

1 MS. DUNN: Yes. We will take care of it, Your
2 Honor.

3 THE WITNESS: Whose counsel? Our counsel?

4 THE COURT: Yes.

5 THE WITNESS: Okay.

6 THE COURT: But the exhibit is in evidence with
7 those redactions.

8 (Defendant's Exhibit Number 319
9 admitted into
10 evidence.)

11 MS. PREWITT: Your Honor, may I confer with
12 counsel for a moment?

13 THE COURT: Yes.

14 (Counsel confer.)

15 MS. DUNN: We just want to communicate to the
16 witness that we are going to take care of his concerns in
17 the redaction.

18 THE COURT: That's fine.

19 THE WITNESS: Great. Thank you.

20 BY MS. DUNN:

21 Q So, sir, you just testified that in 2016 The Trade Desk
22 had scale?

23 A I don't think I testified that.

24 Q Okay. You made the point that this document is from
25 2016, and in 2016 The Trade Desk was pitching itself to

Cross-Examination - J. Dederick

1 customers based on the fact that you had scale, right?

2 A Yes. I see that that's in this document, yes.

3 Q Okay. And The Trade Desk has grown quite
4 substantially, actually, since 2016; isn't that correct?

5 A Yes.

6 Q Okay. All right. If you could turn in your binder to
7 Defense Exhibit 1484.

8 MS. DUNN: This is a 10K filing with the SCC. So,
9 therefore, based on the Court's earlier statement about
10 SCC -- or government filings, I don't anticipate an
11 objection. But we'd like to use this document.

12 THE COURT: All right. This is a publicly filed
13 document, I'm assuming. So there shouldn't be any problem
14 with sealing. These are made under the penalty of perjury.
15 So I assume there's no objection. Correct?

16 MR. GUARNERA: No objection, Your Honor.

17 THE COURT: All right. Then 1484 is in evidence,
18 Defense 1484.

19 (Defendant's Exhibit Number
20 1484 admitted into
21 evidence.)

22 MS. DUNN: Thank you, Your Honor.

23 BY MS. DUNN:

24 Q All right. So, Mr. Dederick, if you can direct your
25 attention to page 5 of 90, you will see a paragraph entitled

Cross-Examination - J. Dederick

1 "Summary of Risk Factors."

2 Do you see that?

3 A Yes.

4 Q Okay. And do you see in the sixth bullet at the
5 bottom, it says, "The market in which we participate is
6 intensely competitive, and we may not be able to compete
7 successfully with our current or future competitors."

8 Do you see that?

9 A I see those words. Significant context.

10 Q You understand, sir, this is an SCC filing by the
11 company, as the Court just said, made under penalty of
12 perjury, right?

13 A Yes.

14 Q Okay. So there's no reason to think that that bullet
15 is inaccurate, is there?

16 A We're informing the investment community of -- no. I
17 mean, this is very important part of how we're communicating
18 to the investment community around risks to our business.
19 So yes.

20 Q Okay. And then if you look at the fourth bullet,
21 you'll see it says, "The market for programmatic buying for
22 advertising campaigns is relatively new and evolving."

23 Do you see that?

24 A I see those words, yes.

25 Q Okay. And so the market being referred to in the last

Cross-Examination - J. Dederick

1 bullet as the market in which The Trade Desk participates is
2 the market for programmatic buying for advertising campaigns
3 that is two bullets above that, correct?

4 A I will need to just read these for context in order to
5 answer your question.

6 Q Sure.

7 Sir, are you set?

8 A Well, I'm still reading.

9 THE COURT: Well, it speaks for itself. We don't
10 really need an answer to that.

11 BY MS. DUNN

12 Q All right. Sir, if you turn to page 7 --

13 A Okay.

14 Q Okay. Do you see where it says, "The Trade Desk offers
15 a self-service cloud-based ad-buying platform that empowers
16 our clients to plan, manage, optimize, and measure more
17 expressive data-driven digital advertising campaigns. Our
18 platform allows clients to execute integrated campaigns
19 across ad formats and channels, including video (which
20 includes connected TV), display, audio, digital out-of-home,
21 native, and social on a multitude of devices such as
22 computers, mobile devices, televisions, and streaming
23 devices."

24 Do you see that?

25 A Yes, I see those words.

Cross-Examination - J. Dederick

1 Q You understand integrated to mean that a client can
2 design one campaign across all of those ad formats if they
3 chose?

4 A Remind me. Where is the word "integrated"?

5 Q It is highlighted on the screen.

6 A So what this means is, if a client has creative assets
7 available across different channels, they can use them in
8 the same platform.

9 Q And this includes ads that appear in apps, correct?

10 A I don't know what year -- I forget what year this is
11 from, but today, yes, we do buy ads that appear in apps.

12 Q This is from 2022.

13 A Okay. Yes.

14 Q Okay. And you're also aware that multiple ad formats,
15 like those mentioned here and including traditional banner
16 ads, native ads, and out-stream video, can compete to fill a
17 single slot, right?

18 A I don't think I understand what you mean.

19 Q If you're bidding on a single slot for an ad, there is
20 competition between traditional banner ads, native ads, and
21 out-stream video ads. That's true, correct?

22 A What do you mean by "slot"?

23 Q A square on a webpage, for example.

24 A A square on a webpage is a standardized format. So if
25 it calls for an open web display ad, you can't serve a video

Cross-Examination - J. Dederick

1 ad in it.

2 Q All right. We'll come back to that in a second.

3 If you turn to page 19 of this document.

4 A Okay.

5 Q Are you there?

6 A I'm here.

7 Q So if you look at the bold and italics line, it says,
8 "We operate in a highly competitive and rapidly changing
9 industry. We expect competition to persist and intensify in
10 the future, which could harm our ability to increase revenue
11 and maintain profitability."

12 Do you see that?

13 A Yeah, I see those words.

14 Q Okay. Then it says, "New technologies and methods of
15 buying advertising present a dynamic competitive challenge
16 as market participants develop and offer new products and
17 services and at capturing advertiser spend or disrupting the
18 digital marketing landscape."

19 Do you see that?

20 A Yes, I see those words.

21 Q Okay. So it's fair to say The Trade Desk competes with
22 new technologies and methods of buying advertising, correct?

23 A That's a broad statement. What do you mean by we
24 compete with new technologies and methods of buying
25 advertising?

Cross-Examination - J. Dederick

1 Q Well, it says here, "New technologies and methods of
2 buying advertising prevent [sic] a dynamic competitive
3 challenge."

4 So I'm just asking you whether it's fair to say
5 The Trade Desk competes with new technologies and methods of
6 buying advertising.

7 A Yeah. Our DSP competitors are constantly coming out
8 with new technologies and ways to buy advertising. So, yes,
9 that happens in our category.

10 Q But you would agree you don't see here any mention of
11 just only DSP, right?

12 A This whole document is about a DSP.

13 Q Are you able to predict what is going to happen
14 competitively to The Trade Desk within the next five years?

15 A No.

16 Q How about in the next two years?

17 A No.

18 Q Ten?

19 A No.

20 Q Okay. All right. With respect to -- actually, can you
21 turn to DTX 1022. All right. This is an email with a deck
22 attached. And the email says, "Thank you for joining Jed's
23 session on JPBs [sic]."

24 Do you see that?

25 A I'm sorry. I don't have the -- where is it? 1022 you

Cross-Examination - J. Dederick

1 said?

2 Q 1022.

3 THE COURT: Is there any objection to 1022?

4 Are you moving it in?

5 MS. DUNN: Yes, Your Honor.

6 THE COURT: Any objection?

7 MR. GUARNERA: We have hearsay objection, Your
8 Honor. If there is a business records exception, we think a
9 foundation would need to be laid.

10 MS. DUNN: This is a presentation --

11 THE COURT: Well, wait. Ask the question again.

12 MS. DUNN: All right.

13 BY MS. DUNN

14 Q Mr. Dederick, do you recognize this document? And what
15 is it?

16 A I can tell what it is. I don't remember it exactly
17 from 2020, but this looks like an internal educational
18 document.

19 Q Okay. Do you see where it says, "Hello, all. Thank
20 you for joining Jed's session on JBP's."

21 Do you see that?

22 A Yes, I see those words.

23 Q And Jed is you, right?

24 A Last I checked.

25 Q Okay. And what's a JBP?

Cross-Examination - J. Dederick

1 A Honestly, the discussions of our commercial
2 relationships with our clients gets into pretty confidential
3 territory. But what I'll say is it's commercial agreements
4 with our clients.

5 Q And do you see it attaches a deck? And it says, "If
6 you have any questions, please feel free to email me and
7 Jed."

8 You see that, right?

9 A I see those words, yes.

10 MS. DUNN: Okay. Your Honor, I move to admit
11 1022.

12 And for the benefit of the witness, everything
13 after page 4 is redacted.

14 MR. GUARNERA: Your Honor, I don't think that the
15 proper foundation for this has been established.

16 THE COURT: No. I'm letting it in.

17 THE WITNESS: This has confidential information in
18 it before page 4. This is about our pricing models with
19 clients and how they work.

20 THE COURT: Again, Trade Desk is not a party to
21 this case; it's just a third party. I think this is going
22 beyond what we need. You better be more specific.

23 MS. DUNN: Okay.

24 THE COURT: All right.

25 BY MS. DUNN:

Cross-Examination - J. Dederick

1 Q Mr. Dederick, if you could, just look at page 3 of this
2 document.

3 THE COURT: No. There's nothing on this page
4 that's appropriate.

5 THE WITNESS: Your Honor, I feel uncomfortable.

6 THE COURT: I've ruled. I don't see any basis for
7 this exhibit going in.

8 MS. DUNN: I'm sorry, Your Honor?

9 THE COURT: The exhibit is out. It doesn't add
10 anything.

11 BY MS. DUNN:

12 Q Mr. Dederick, have you ever given a presentation at The
13 Trade Desk where you talked about winning media share from
14 Google, Facebook, and Amazon?

15 A I don't -- can you be more specific?

16 Q Sure. Did you give such a presentation in 2020?

17 A I don't remember.

18 Q Okay. Do you recall at your deposition testifying that
19 The Trade Desk has very -- really consistent take rate
20 trends? Do you recall that?

21 MR. GUARNERA: Your Honor --

22 THE COURT: Well, we haven't even heard the full
23 question. You're on your feet before she even finishes.

24 All right?

25 How much longer are -- you are not getting very

Cross-Examination - J. Dederick

1 far with this. You've already established that they
2 compete. All right? You've established that Google is one
3 of the competitors. I mean, you've established many things.

4 How much more are you trying to get out? because
5 this is getting tedious and not going very far.

6 MS. DUNN: So, Your Honor, I'm glad to hear we
7 have established many things. I do think a lot of this goes
8 directly to market definition in this case, which is
9 obviously an extremely important issue that the Court is
10 going to need to consider. We have worked very hard --

11 THE COURT: Well, then, go right to the market
12 definition issue. I think you're already somewhat there.

13 MS. DUNN: Well, the Court is the fact finder; so
14 I'm going to move along.

15 BY MS. DUNN:

16 Q All right. Sir, you testified yesterday about the lens
17 through which The Trade Desk views the advertising
18 ecosystem.

19 Do you recall that?

20 A We -- that sounds like a lot of what I talked about.
21 Remind me what you're referring to from that testimony.

22 Q Well, yesterday, you testified that The Trade Desk has
23 raised concerns with Google about the terms of the AdX
24 auctions.

25 Do you recall that?

Cross-Examination - J. Dederick

1 A Yes, I recall saying that on calls with Google, The
2 Trade Desk has communicated that we feel that the -- we
3 don't trust the AdX auction dynamics.

4 Q Okay. And you took issue with the terms and conditions
5 of dealing with Google, correct?

6 A I don't recall saying that.

7 Q Okay. But isn't that the case?

8 A That's very broad. I don't --

9 Q Is the answer no?

10 A Will you repeat.

11 Q Yeah. In your testimony, are you taking issue with the
12 terms and conditions of dealing with Google?

13 A "Terms and conditions" sounds like a legal term. They
14 have been draconian and absolutist, and they haven't
15 accepted our feedback when we've given it.

16 Q Okay. And you said you had conversations with Google.

17 When were those meetings that you're referring to?

18 A I mean, we would meet with our -- because we buy from
19 AdX, we would meet on a regular basis with the AdX
20 partnerships teams.

21 Q And who did you meet with in particular? Do you
22 recall?

23 A No, I don't recall.

24 Q And do you recall when these meetings were?

25 A They happen frequently. I mean, they -- frankly, there

Cross-Examination - J. Dederick

1 are many fewer of them now. But you would typically do a
2 quarterly QVR. So I would say in the state of a healthy
3 partnership, you would have probably a quarterly review, and
4 I would have sat in or seen the documentation from some of
5 those quarterly reviews.

6 Q Okay. I'm just trying to pin down. When you're saying
7 that you had meetings with Google and you're testifying
8 about those meetings, I'm just trying to pin down the time
9 frame you're talking about.

10 A We've been buying from AdX since, I think, 2011. So
11 there's been a lot of meetings. It's not an isolated case
12 providing feedback that's not, you know -- so I would say
13 that it's happened frequently over the years.

14 Q Okay. But the concerns that you're talking about
15 expressing, has that been in every meeting you've expressed
16 those concerns?

17 A We obsess over supply chain transparency. We obsess
18 over fair options. So at all times, when we are talking to
19 SSPs and those who oversee the auctions, is what are the
20 rules? Do I know about them? Are you providing data that's
21 auditable so that I know you're telling me the truth?

22 That's an always-on conversation.

23 Q Okay. So earlier we talked about whether multiple ad
24 formats can compete to fill the same ad slot.

25 Can you look in your binder at Defense

Cross-Examination - J. Dederick

1 Exhibit 1139.

2 A All right. I'm sorry. I don't see it. 1139?

3 Q Correct.

4 A I don't see it.

5 Okay. I've got it. Sorry.

6 Q Okay. Can you direct your attention to page 1.

7 There's an email from Stacy Kim, senior director of
8 inventory partnership at The Trade Desk.

9 Do you see that?

10 A My 11 -- oh. Yes, I see that this email is from Stacy
11 Kim.

12 Q Okay. Do you see where she says, "We are able to
13 process two-plus formats in a single AdX bid request?"

14 Do you see that?

15 MR. GUARNERA: Your Honor, we object to the use of
16 this exhibit in this way. Mr. Dederick does not appear to
17 be on it. Counsel is just reading from the email and
18 reading from email into evidence in open court.

19 THE COURT: Again, you could phrase your question
20 differently and still get this out, it seems to me.

21 MS. DUNN: Your Honor, I asked this question. He
22 said no. I'm showing him a document, and I will ask him
23 whether he, having looked at the document to refresh his
24 recollection, whether this is the case. He believes this is
25 not the case. This is -- I mean, it's quite relevant.

Cross-Examination - J. Dederick

1 MR. GUARNERA: Your Honor, how could it refresh
2 his recollection if he --

3 THE COURT: I'm sorry?

4 MR. GUARNERA: How could it refresh his
5 recollection if he's not on the email?

6 THE COURT: Well, it can. You can use a cigar
7 wrapper to refresh memory, if I remember law school
8 correctly.

9 You have to first lay the foundation question.
10 You ask the question. If the person says I can't remember
11 or I don't know, "Would something refresh your memory?" and
12 then you show it. And you can show them anything. That's
13 not a good objection.

14 THE WITNESS: This is a document about the
15 technical integrations between The Trade Desk and SSP
16 partners, you know. So I really am not familiar with what's
17 being discussed in this email.

18 BY MS. DUNN:

19 Q Okay. My question is is it accurate that The Trade
20 Desk is able to process two-plus formats in a single AdX bid
21 request?

22 A The concept of a bid request is a webpage or any
23 publisher, someone's watching, and there's an opportunity to
24 show an ad. You need standardization in order to understand
25 what ad that's going to be.

Cross-Examination - J. Dederick

1 So that's what I was referring to. So --

2 Q So is the answer to my question yes?

3 A What was your question?

4 Q Whether it is possible for The Trade Desk to process
5 two-plus formats in a single AdX business request.

6 A You know, this technical integrations language appears
7 to be just in a different context from the conversation we
8 were having earlier; so I don't know what this refers to.

9 Q Sir, I'm just asking whether, yes, what I said is true,
10 no, it's not, or you don't know.

11 THE COURT: I'm going to move this along because I
12 don't think a single bid request is specific enough. All
13 right.

14 MS. DUNN: Okay. Can I ask about specific kinds
15 of ads?

16 THE COURT: Yeah. But we've had a lot about that
17 already from other people in this case.

18 MS. DUNN: Okay.

19 BY MS. DUNN:

20 Q All right. Let's talk about something you talked about
21 yesterday, Open Path.

22 Do you recall talking about that yesterday?

23 A Yes.

24 Q Okay. And Open Path is part of the inventory
25 partnership's team which, before you were CRO, reported to

Cross-Examination - J. Dederick

1 the then-CRO Tim Sims, correct?

2 A I don't know what you mean by Open Path is part of a
3 partnership's team.

4 Q Okay. Yesterday you testified about Open Path, and
5 that is described as The Trade Desk's supply path
6 optimization offering, right?

7 A Open Path is The Trade Desk's capacity to plug directly
8 into, typically, a publisher ad server, bypassing an
9 exchange.

10 Q Okay. All right. Can you take a look at DTX 1794.

11 A Okay.

12 Q This is a document produced by The Trade Desk. It's
13 called "Open Path Training."

14 Have you seen this before?

15 A Is that a question? I'm sorry? Were you asking me --

16 Q Have you seen this before?

17 A I don't recall seeing this exact document.

18 MS. DUNN: Your Honor, this document does contain
19 schematics that visually depict what Open Path is.

20 THE COURT: Why don't you have the witness
21 describe his understanding of how Open Path operates.

22 MS. DUNN: Okay.

23 THE COURT: All right.

24 MS. DUNN: He has described it, and it is
25 contradicted by the company documents. I think that's the

Cross-Examination - J. Dederick

1 problem we're having.

2 THE COURT: Well, that's more subtle than I'm able
3 to handle right now. So have him describe it again, and
4 we'll see whether there's an inconsistency. All right?

5 BY MS. DUNN:

6 Q Mr. Dederick, can you please describe your
7 understanding about how Open Path works.

8 A Open Path is a connection where The Trade Desk tries to
9 establish a more direct supply path toward buying publisher
10 inventory on behalf of advertisers and agencies.

11 Q And you said that Open Path enables bypass of the
12 exchange, correct?

13 A Typically, that's the case.

14 Q Okay. But it's also possible that Open Path can bypass
15 the publisher ad server as well, correct?

16 A The publisher needs an ad server. How else would it
17 select an ad?

18 Q Right. Are you familiar with something called Prebid?

19 A Yes.

20 Q Okay. So you know that Prebid enables publishers to
21 put code directly on their websites to connect with
22 different ad tech demand sources, right?

23 A And then passes them to an ad server.

24 Q Right. But you are aware that publishers can use
25 Prebid without an ad server, right?

Cross-Examination - J. Dederick

1 A I'm not sure what you're referring to. I mean, an ad
2 server is the functionality that enables a publisher to
3 actually serve, display, and track the ads on its site. So
4 I'm not sure what you're referring to.

5 Q My question is whether you're aware that a publisher
6 running Prebid can do so without an ad server?

7 A Your question suggests that a publisher can display
8 banner ads without an ad server. I don't understand how
9 that would work.

10 Q My question is whether you're aware that Prebid can run
11 without an ad server?

12 A And I've answered your question.

13 Q And your answer is no, that's not something you're
14 aware of?

15 A I don't understand the foundation of your question.

16 Q All right. Now, another way that a third-party ad
17 server can be cut out through Open Path integration is if
18 the company -- the publisher has its own ad server; isn't
19 that correct?

20 A I'm sorry. A third-party ad server is typically
21 something that refers to the advertiser's ad server.
22 There's an ad server on the buy side. Are you referring to
23 the publisher ad server?

24 Q Yes. I'm saying that a way -- well, we just discussed
25 Prebid. We didn't agree on that.

Cross-Examination - J. Dederick

1 Another way to cut out the third-party ad server
2 is if the publisher has its own ad server?

3 A You just said that you could cut out an ad server if
4 they have an ad server. I don't understand what you mean.

5 Q Okay.

6 A I mean, if they build an ad server, yes, they have an
7 ad server. It's theirs. They built it.

8 Q Okay. That's a fair clarification.

9 So you would need to use, for example, GAM, or
10 Google's ad server, if the publisher had its own ad server?
11 That's what we're talking about.

12 A Yeah. If the publisher has enough demand to not
13 require the millions of advertisers that come with a GAM
14 implementation -- so if you're the very biggest in the
15 world, you might not need all of the demand that comes from,
16 frankly, Google search.

17 Q Okay. So, for example, Disney, right? Disney, you're
18 aware, has its own ad server, right?

19 A Yes.

20 Q And Open Path has a connection to Disney, for example?

21 A I'm not sure the status of our conversations with
22 Disney relative to Open Path.

23 Q Okay. But you understand Disney is a major player in
24 connected TV, right?

25 A Yes.

Cross-Examination - J. Dederick

1 Q Okay. And, therefore, it would be possible for Open
2 Path to allow bypass of the ad exchange. You don't need to
3 use Google's ad server because Disney, just for example, has
4 its own ad server in that circumstance?

5 A As long as Disney has their own built-in ad server and
6 they -- yes.

7 Q Okay. Sitting here, off the top of your head, are you
8 aware of other companies that have their own ad servers?

9 A I can only think of ad servers that I think are in
10 production. I don't know that they own them or that they're
11 out.

12 Q Okay. What are the ad servers you're aware of that are
13 in production?

14 A You know, I wouldn't want to speculate. I've
15 understood and heard about that interest across the
16 industry; but, frankly, some of those conversations would
17 have been confidential to those companies. So it's too
18 speculative for me to talk about that.

19 Q Okay. But just for our record, you've had
20 conversations across the industry about companies making
21 their own proprietary in-house ad server?

22 A Maybe one or two.

23 Q Okay. And just also for the record, when were those
24 conversations?

25 A I don't recall when.

Cross-Examination - J. Dederick

1 Q All right. Open Path is functionality that can be used
2 across the web, across CTV, and in-app, correct?

3 A Open Path product functionality is -- I am not aware of
4 where Open Path functionality -- you know, I believe that
5 that is at least -- whether or not we support all of those
6 today, that's what we expect.

7 MS. DUNN: We're nearing the end of --

8 THE COURT: All right. Go ahead.

9 MS. DUNN: All right.

10 BY MS. DUNN:

11 Q And you agree, sir, that in order to have inventory for
12 your advertiser customers to buy through Open Path, you need
13 to have supply partnerships with publishers, correct?

14 A Yes, very small.

15 Q And you've entered into contracts with publishers that
16 specify those terms and conditions, correct?

17 A Yes. There would be contracts with those publishers.

18 Q Okay. And you've announced in press releases that
19 through Open Path, for example, The Trade Desk is partnering
20 with Reuters, *The Washington Post*, Gannett, *USA Today*, *Condé*
21 *Nast*, BuzzFeed, *The L.A. Times*, and *Forbes*. Do you know
22 that?

23 A If you have the press releases, I'll take your word for
24 it. It sounds right.

25 Q All right. You testified yesterday a little bit about

Cross-Examination - J. Dederick

1 open bidding. Do you remember that?

2 A Uh-huh.

3 Q Okay. In connection with introducing Open Path, The
4 Trade Desk stopped buying inventory through Google's open
5 bidding, correct?

6 A Those -- we made those two announcements around the
7 same time.

8 Q Which two announcements are you talking about? The
9 announcement of Open Path and the announcement that you were
10 going to stop buying on Google's open bidding?

11 A Yes.

12 Q Okay. And what time was that, roughly? 2022? Does
13 that sound right?

14 A Yeah, that sounds right.

15 Q Okay. All right. You testified yesterday that open
16 bidding, you said, decimated header bidding. Are you aware
17 that the percentage of indirect web impressions won by
18 header bidding within DFP has actually risen substantially
19 over the past four years?

20 A I would challenge your definition of header bidding
21 relative to the conversation we had yesterday. We spoke
22 about a very specific header bidding implementation that was
23 popularized in 2016 and 2017. So I think what you're
24 referring to is a different implementation. It has similar
25 words.

Cross-Examination - J. Dederick

1 Q Okay. But thinking now about the -- what you consider
2 to be a different implementation of header bidding, you
3 wouldn't disagree that that has risen substantially?

4 A The implementation and work stream I discussed
5 yesterday has not risen substantially.

6 Q Okay. All right. So -- so you've now mentioned that
7 there are -- the current implementation of header bidding is
8 different from the implementation of header bidding you
9 discussed yesterday, which you said was around 2017.

10 Can you explain for the Court what is the
11 difference between the current implementation and the
12 implementation you testified about yesterday?

13 A So all header -- these words, "header bidding," what
14 they refer to is putting code in the website that's called
15 prior to the ad server. And so any kinds of code that are
16 called prior to the ad server today you could fit into the
17 terminology of header bidding. Our industry loves to do
18 that kind of thing.

19 But the implementation that I discussed yesterday
20 was specifically a way that multiple exchanges could compete
21 on a more level playing field and then know where the
22 highest bid came from before it went into the ad server.
23 That work stream is not happening that way today.

24 Q Okay. One last question on this.

25 Can header bidding be used for video ads on

Redirect Examination - J. Dederick

1 websites?

2 A Again, with the acknowledgment of the very broad
3 terminology, I mean, yes.

4 Q How about display ads on websites?

5 A With the broad definition, yes.

6 Q How about native ads on websites?

7 A Yes.

8 Q Okay.

9 MS. DUNN: Your Honor, no further questions.

10 THE COURT: All right.

11 Redirect?

12 MR. GUARNERA: May I proceed, Your Honor?

13 THE COURT: Yes, sir.

14 REDIRECT EXAMINATION

15 BY MR. GUARNERA

16 Q Mr. Dederick, yesterday counsel for Google asked you a
17 few questions about Google search. Do you remember that?

18 A Yes.

19 Q And I think you started to give an answer but weren't
20 able to finish it. So I wanted to make sure you had the
21 opportunity to answer the question.

22 What effect do you see Google search having on the
23 buying and selling of open web display ads?

24 A There's really direct correlation. I mentioned
25 yesterday Google built an incredible product and changed the

Redirect Examination - J. Dederick

1 front door of the internet from the browser to the search
2 bar.

3 THE COURT: You need to move closer, please, to
4 the microphones.

5 THE WITNESS: Okay.

6 Google changed the -- they created an incredible
7 search product. The front door to information on the
8 internet became the search bar, and they amassed millions of
9 search advertisers, the most successful, you know, ads
10 business and ad product ever.

11 Those millions of advertisers were wanting more
12 and more. They had one place in our industry where there's
13 more demand than there is supply is in search. And the
14 natural extension was to take that demand that was generated
15 from search -- it's millions of advertisers -- and find
16 places where there was more supply than there was demand.
17 And those were obviously a few places, the websites that
18 Google search linked out to which would call open web
19 display banner ad opportunities.

20 And so the initial implementation of Google's
21 publisher ad server said do you want the demand from
22 millions of search advertisers and implement this? That
23 foundational sort of connection is central to why that DFP
24 publisher ad server is dominant today.

25 BY MR. GUARNERA

Redirect Examination - J. Dederick

1 Q What is the relationship between Google search and DFP,
2 Google's ad server?

3 A It was the Google search demand that Google built up
4 with millions of advertisers that enabled them to offer that
5 demand to open web publishers if they implement that ad
6 server.

7 MS. DUNN: Your Honor, I'm just going to object on
8 foundation grounds at a certain point.

9 THE COURT: Well, at a certain point -- object
10 when the point comes.

11 BY MR. GUARNERA

12 Q You can finish your answer, Mr. Dederick.

13 A Okay. That fundamentally is why it's impossible to say
14 no to implementing DFP unless you're Disney, which we talked
15 about earlier.

16 Q Mr. Dederick, I think you also were asked a few
17 questions about TAM, target addressable markets.

18 Do you remember that?

19 A Yes.

20 Q And I think you were about to give an example or
21 provide additional context for how The Trade Desk thinks
22 about target addressable markets. Do you remember that?

23 A Yeah, I do.

24 Q What additional context do you think the Court should
25 know about how The Trade Desk thinks about target

Redirect Examination - J. Dederick

1 addressable markets?

2 A Well, the global ads market is massive. There's a
3 tremendous amount of spend outside of the United States that
4 The Trade Desk -- you know, there's a tremendous amount
5 of -- outside the United States. There's a tremendous
6 amount in small to medium businesses. So we are always
7 looking at the impacts/trends of the global ad spend.

8 We specifically compete within the DSP category.
9 And, you know, not all of that trillion dollars, I think, is
10 immediately available to compete for in the DSP category.

11 So the analogy I was using was -- you know, it's
12 similar to if you think about Ford Motor Company and Delta
13 Air Lines. Both of them are potential and in some sense
14 compete for our travel expenses and budgets, but I wouldn't
15 call the two companies competitors.

16 That was what I was trying to get out.

17 Q Mr. Dederick, you were asked a few questions about what
18 is or is not a dynamic market in ad tech.

19 Do you recall that?

20 A Yes.

21 Q Do you consider ad exchanges to be a dynamic market?

22 A No.

23 Q Why not?

24 A You know, the -- because of the correlation that I
25 described between search and DFP, the same correlation

Redirect Examination - J. Dederick

1 carried over between DFP and AdX. If you want this search
2 demand, these millions of advertisers, use AdX.

3 So that exact same chain of events is -- really
4 explains the rise of AdX, in my view.

5 Q Do you believe publisher ad servers are a dynamic
6 market?

7 A No.

8 Q Why not?

9 A I can -- I don't think I can think of another publisher
10 ad server as I sit here now that has any meaning.

11 Q Mr. Dederick, we talked a little bit about ad
12 networks -- or you spoke with Google's counsel about ad
13 networks on the cross-examination.

14 Do you recall that?

15 A Yes.

16 Q And you talked about how there's a publisher-facing
17 element of many ad networks, correct?

18 A I talked about that buyers would look at an ad network
19 as the opportunity to send in insertion orders and buy ads
20 similar to the way they would look at, like, a publisher.

21 Q Do ad networks also offer advertiser-facing tools that
22 would allow advertisers to buy ads?

23 A Yes.

24 Q For example, would an advertiser ad network like Google
25 Ads have to allow advertisers to enter an ad budget?

Redirect Examination - J. Dederick

1 A Yes.

2 Q Does there have to be some way for an advertiser to
3 upload an ad into an ad network?

4 A If it's self-service, which Google's ad network is,
5 then yes, that's possible.

6 Q And advertisers are on the buy side of the ad tech --
7 on the buy side of ad tech, correct?

8 A Yep.

9 Q Mr. Dederick, does Facebook offer an ad exchange that
10 conducts auctions for open web display advertising?

11 A No.

12 Q Does Amazon offer an ad exchange that conducts auctions
13 for open web display advertising?

14 A No.

15 Q Does Facebook offer a publisher ad server that allows
16 publishers to sell open web display ads?

17 A No.

18 Q Does Amazon offer a publisher ad server that allows
19 publishers to sell open web display ads?

20 A No.

21 MR. GUARNERA: May I have just one moment, Your
22 Honor?

23 THE COURT: Yes, sir.

24 (Counsel confer.)

25 MR. GUARNERA: No more questions, Your Honor.

Recross-Examination - J. Dederick

1 THE COURT: All right.

2 Ms. Dunn, that was a very short redirect. Do you
3 have anything for recross?

4 RECROSS-EXAMINATION

5 BY MS. DUNN

6 Q Mr. Dederick, you testified Amazon doesn't offer an ad
7 exchange for open web display advertising. Does it offer a
8 header bidding solution for open web display advertising?

9 A Again, there's -- I know what you're -- I think I know
10 what you're referring to where there's code that can be
11 called in -- you know, on the page ahead of an ad server
12 that Amazon developed. So I think I know what you're
13 referring to. It's very different from the header bidding
14 implementation that we talked about yesterday.

15 Q Right. But the answer is yes, they have developed such
16 a product, correct?

17 A They have technology that can sit in the header of
18 websites.

19 Q And that can call other exchanges, correct?

20 A I'm really not familiar with the header technology that
21 Amazon developed.

22 Q Okay. What you described as a foundational
23 relationship between search and banner ads, what time period
24 were you talking about?

25 A Around the last -- well, I mean, the last sort of 10 to

Direct Examination - R. Goel

1 15 years.

2 MS. DUNN: Your Honor, no further questions for
3 this witness.

4 THE COURT: All right.

5 Does either side think they're going to call
6 Mr. Dederick again?

7 MR. GUARNERA: Your Honor, we would like to
8 reserve the option of calling Mr. Dederick.

9 THE COURT: All right.

10 So, Mr. Dederick, you can leave now. I don't know
11 when, if at all, you'll be needed back here. You'll have to
12 stay in touch with counsel. But you'll have to return if
13 they request your reappearance. All right?

14 But you're free to go. You can't discuss your --
15 you can't watch the trial and you can't discuss your
16 testimony with any witness that has not yet testified.

17 Okay. Next witness.

18 MS. WOOD: Yes, Your Honor. Plaintiffs call
19 Rajeev Goel.

20 Thereupon,

21 RAJEEV KUMAR GOEL,
22 Having been called as a witness on behalf of the plaintiffs
23 and having been first duly sworn by the Deputy Clerk, was
24 examined and testified as follows:

25 (Time noted: 3:15 p.m.)

Direct Examination - R. Goel

1 THE COURT: Are you all set, Ms. Wood?

2 MS. WOOD: Sorry. We're looking for my copy of
3 the binder. One second, Your Honor. Apologies.

4 I'll go ahead and get started. I'm confident
5 they'll find it for me. Thank you.

6 DIRECT EXAMINATION

7 BY MS. WOOD

8 Q Good afternoon, Mr. Goel. Can you please state your
9 full name and spell it for the record. My name is Julia
10 Wood.

11 A Rajeev Kumar Goel, R-A-J-E-E-V, K-U-M-A-R, G-O-E-L.

12 Q Okay. And can you please tell the Court where are you
13 currently employed?

14 A PubMatic.

15 Q And what is your position at PubMatic?

16 A Cofounder and CEO.

17 Q And if you could just move your chair a little bit
18 forward closer to that microphone, I think that would help.

19 A You got it.

20 Q I'm sorry. Your position at PubMatic?

21 A Cofounder and CEO.

22 Q Okay. Great. And when was PubMatic founded?

23 A Founded in 2006.

24 Q 2006. Okay. What is PubMatic?

25 A PubMatic is a sell-side platform or exchange technology

Direct Examination - R. Goel

1 provider helping publishers generate more revenue from their
2 ad inventory.

3 THE COURT: You need to keep your voice up.

4 THE WITNESS: Okay. You got it, Your Honor.

5 THE COURT: All right. You're a seller-side what?

6 THE WITNESS: Yeah, sell-side platform or ad
7 exchange that helps publishers generate more yield or
8 revenue for their ad inventory.

9 BY MS. WOOD

10 Q Now, you indicated that PubMatic was founded in 2006.
11 Who was involved in that?

12 A Myself and a couple of other cofounders.

13 Q And who were the cofounders?

14 A One is my brother, Amar Goel, and the other is Mukul
15 Kumar.

16 Q Okay. And can you describe at a high level your
17 professional background before you and your brother
18 cofounded PubMatic?

19 A Sure. My background is in entrepreneurship and
20 software companies, software building. So PubMatic is the
21 third company that I've started. And in addition to that, I
22 worked a SAP, a large German software company, as well as in
23 technology strategy consulting.

24 Q Okay. And what about your brother, Mr. Amar Goel? Can
25 you tell me a little bit about what his professional

Direct Examination - R. Goel

1 background was prior to your founding of PubMatic together.

2 A Sure. Yeah, PubMatic was also his third start-up. The
3 other two, we did together. And he worked at McKinsey and
4 Microsoft in ad sales.

5 Q In ad sales?

6 A In ad sales at Microsoft, yes.

7 Q Now, if you can describe to the Court, what led you and
8 your brother to found PubMatic in 2006?

9 A Sure. As we were thinking about starting our next
10 company, our third company, we discovered that there's a
11 significant opportunity to help publishers better monetize
12 their ad inventory and audiences.

13 And what we saw is that the digital advertising
14 ecosystem, while still in its infancy at that time, we
15 thought would grow to be pretty significant. We saw how
16 advertising was bought and sold as the industry transitioned
17 from analog -- things like print magazines or radio -- to
18 digital would change and that there were not systems or
19 technology tools in particular to help publishers navigate
20 that shift. And so that was the starting of PubMatic, which
21 is publisher and automatic combined.

22 Q Sorry. So PubMatic is the word "publisher" and
23 "automatic" combined?

24 A That's correct, yeah.

25 Q Understood. Now, let's talk a little bit about the

Direct Examination - R. Goel

1 market environment in 2006. How was online advertising
2 conducted at that time generally?

3 A Generally, there were two main methods of selling ad
4 space. One was through insertion orders or direct sales; so
5 a publisher's sales team would sell ad inventory directly to
6 an advertiser or an agency. And then the second method was
7 through unsold ad inventory, sometimes called remnant ad
8 inventory. And that would be sold via ad networks.

9 Q And what is remnant inventory in this context?

10 A Yeah. So in this context, remnant simply refers to any
11 inventory that a publisher's sales team could not sell
12 directly. So it would be the leftover inventory, which is
13 in some cases could be a very significant portion of the
14 inventory. In some cases, there may be no remnant
15 inventory.

16 Q And why would an online publisher have remnant or
17 leftover inventory? Why couldn't they just sell it all
18 directly?

19 A Sure. So a publisher would typically try to sell all
20 of their ad inventory directly, but there may not be enough
21 buyers. They may not have enough time to find buyers in a
22 given quarter or in a given year.

23 Inventory forecasting can also be challenging.
24 So, for instance, if we think about live sports and ad
25 inventory, that might go against live sports or a large news

Direct Examination - R. Goel

1 event.

2 I remember when Michael Jackson passed away, that
3 was a very large day on the internet. It was a record for
4 us at that time. This was many years ago. But many news
5 publishers had unforecasted amounts of ad inventory, and so
6 the primary way for them to sell that would be this
7 remnant ad network approach.

8 Q And so explain. Why would a big news day generate more
9 ad inventory?

10 A Sure. Because consumers are reading news stories more.
11 They're trying to find out. Another example of that would
12 be, let's say, a weather event, a storm or a hurricane.
13 People are checking the news. They're checking the
14 headlines. They're, you know, looking for information from
15 the government. And so that generates more ad inventory.
16 And often those types of events would be inventory that a
17 publisher did not forecast to have, which would then
18 generate this kind of remnant ad inventory.

19 Q Okay. Now, what was the primary method by which
20 remnant inventory was sold in this 2006 time period?

21 A Yeah. At that time the primary method was to monetize
22 it via ad networks in a waterfall method or approach in
23 which a publisher would sequence a number of ad networks --
24 ad network A, ad network B, ad network C -- and flow that
25 inventory that they could not sell directly first to the ad

Direct Examination - R. Goel

1 network A. And if ad network A could monetize that ad
2 impression, then they would. If not, the ad network would
3 default or pass it back to the publisher. And the publisher
4 would route that ad impression to ad network B and so on
5 until, hopefully, they could sell that ad space.

6 Q And what was the name of that process by which multiple
7 ad networks were called?

8 A The waterfall process.

9 Q Okay. And what were the ad networks that were
10 prominent in that time period in, let's say, 2006 to 2009?

11 A Sure. Some of the larger ad networks were
12 advertising.com, Tribal Fusion, ValueClick, and Google.

13 Q Okay. Now, what was it about the system that was in
14 place at that time that you and your brother decided you
15 could make a new business out of?

16 A So there's a number of challenges with this remnant or
17 waterfall approach.

18 First of all, there's no guarantee that the
19 highest bidder will purchase the ad inventory. So the
20 publisher had to make a determination of what sequence of ad
21 networks to call in the waterfall. And if they chose
22 incorrectly -- you know, of course, there's no way to know
23 in real time who is going to pay the most -- then a buyer
24 could purchase that ad inventory for a price that's below
25 the market value or the price that some other buyer wanted

Direct Examination - R. Goel

1 to pay.

2 Another challenge is around latency or the speed
3 by which an ad can be served. So all of this needs to
4 happen very quickly as the consumer is looking at content or
5 waiting for the content to load, so that is to say in a
6 fraction of a second. And by going from one ad network to
7 the next to the next, that could take time and cause loss of
8 ad inventory.

9 And then third is that ad networks typically, when
10 they did not want to monetize the impression and they would
11 pass it back to the publisher before it was routed to a
12 subsequent ad network, a lot of the data about the ad
13 impression would be removed. And that would damage the
14 value of the inventory.

15 Q All right. So we've talked about some of the
16 inefficiencies of the waterfall. I want to talk about the
17 ad network model itself.

18 What was the economic model of ad networks at that
19 time?

20 A So very simply, the model of an ad network is to buy
21 inventory as cheaply as it can and then sell it at as high a
22 price as possible and usually transforming the inventory
23 between the purchase and the sale.

24 Q Do some people refer to that as an arbitrage model?

25 A Yes, that's correct.

Direct Examination - R. Goel

1 Q Why is that?

2 A In this case, an ad network is not an agent of the
3 buyer; they are a principal. So they are taking ownership
4 of that ad inventory. So they are buying it, again, as
5 cheaply as they can, taking ownership of it, and then
6 selling it.

7 So they're taking on risk, and their revenue or
8 their profit is derived from their ability to manage that
9 arbitrage.

10 Q And so what incentives are there for an advertiser ad
11 network when they are bidding for inventory?

12 A One of the incentives is to buy the inventory as
13 cheaply as possible in order to drive their revenue and
14 their margin up.

15 Q And how did that economic model impact publishers in
16 this early days of digital advertising, let's say, again,
17 2006 to 2009?

18 A So at that time ad networks claimed to serve both the
19 publisher and the advertiser. And one of the key
20 observations that we had is that -- well, claiming that ad
21 networks were, in fact, focused on the needs of the
22 advertiser.

23 And so we thought that we could build a business
24 helping publishers by breaking up the waterfall or changing
25 the approach to managing the waterfall in order to drive the

Direct Examination - R. Goel

1 price of inventory up and drive yield for publishers.

2 Q And so what was your perspective on the desire for ad
3 networks with respect to driving the price of inventory on
4 publishers' websites?

5 A Ad networks did not enjoy that process.

6 Q Okay. Now, what was the first software that you -- was
7 it you or you and your brother wrote in 2006?

8 A Yeah. So I wrote the original spec, specification, for
9 PubMatic, and we had a team of engineers that built it. And
10 we launched it in the fall of 2007.

11 Q And can you describe at a high level -- please, no
12 source code -- but at a high level, what was the name of the
13 software spec that you wrote at the time?

14 A Sure. So what we set out to do is to allow publishers
15 to have multiple waterfalls and actually to change the
16 sequencing of the waterfall on an hourly basis as opposed
17 to, back then, typically a publisher would change their
18 waterfall on a weekly or maybe monthly basis. And they
19 would have typically one waterfall.

20 So we would organize waterfalls. Could be by ad
21 format or ad size, could be by geography, just various
22 different ways in which we could describe an ad. So we
23 could have multiple ways to optimize that sequencing of ad
24 networks.

25 And then the other thing that we would do is log

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1 into ad network user interfaces in an automated way and pull
2 pricing data from those ad networks. There was no notion of
3 real-time bidding back then. But by pulling pricing on a
4 frequent basis -- let's say every 30 minutes or every
5 hour -- we could see changes in reporting and then compute
6 or estimate how much an ad network was paying for a
7 particular type of impression, and then we sequence the ad
8 network on a much more frequent basis -- sorry -- the
9 waterfall on a much more frequent basis.

10 Q So you talked about the waterfall being sequenced.
11 What were the parameters by which most publishers set up
12 their waterfall in this time period?

13 A Yeah. So in 2006 when we started PubMatic, we talked
14 with a number of publishers to figure out how did they
15 optimize the selling of their remnant ad inventory? And
16 many publishers told us the same, which is that they would
17 try to reorder that waterfall on a weekly or monthly basis,
18 but they found it very cumbersome to do so, very difficult
19 to do so. So usually they would just set it and forget it.

20 Q And what are they actually setting?

21 A So what they're setting is in their ad server a
22 sequence of which ad networks to call via a tag on what --
23 you know, linear or sequential or...

24 Q Okay. When you say they're setting it, they're setting
25 that in their publisher ad server?

Direct Examination - R. Goel

1 A That's correct. They're setting it in the publisher ad
2 server.

3 Q Did you view that publisher ad server as a different
4 product?

5 A We did, yes. We view that as a different product.

6 Q So did you ever feel at any point in time that you were
7 competing -- you know, in this time period, competing
8 against publisher ad servers?

9 A No, we did not, not in the 2006, 2007, 2008 time frame.

10 Q Okay. Now, when did PubMatic launch publicly?

11 A We launched in fall of 2007.

12 Q And where did you launch?

13 A At the TechCrunch40 Conference.

14 Q And what is TechCrunch?

15 A TechCrunch -- I don't know if it's -- I guess it is
16 still around. But it was a leading technology -- online
17 technology publication at the time, and that was the -- they
18 did this conference series launching startups for about ten
19 years, I think. The TechCrunch40 Conference in 2007 was
20 their first such conference.

21 Q What was the reaction of the marketplace to your launch
22 through the TechCrunch conference in the fall of 2007?

23 A Yeah. For the launch we did a live demo and a
24 30-minute presentation, and I think there was a panel as
25 well. And then I went to bed that night, and I woke up in

Direct Examination - R. Goel

1 the morning, and there were over a thousand publishers that
2 had signed up.

3 And so that told me that, whether or not our
4 product, you know, solved the problem we were trying to
5 solve, it told me that we had found a meaningful problem in
6 the industry for many players.

7 Q Now, and then when PubMatic was launched in the fall of
8 2007, what were its main competitors at that time?

9 A So there were no competitors that had launched at that
10 time. Within about six to twelve months, there were a
11 couple of other competitors that appeared.

12 Q What were those competitors?

13 A One was called Rubicon Project, which is now Magnite,
14 and the other was Admeld.

15 Q Admeld?

16 A Correct.

17 Q At this period of time in the fall of 2007, had Google
18 acquired DoubleClick?

19 A They had not.

20 Q And at this period of time, to your knowledge, was
21 Google operating an ad exchange?

22 A Not to my knowledge.

23 Q Okay. Now, are you familiar with real-time bidding in
24 the context of open web display ads?

25 A Yes, I am.

Direct Examination - R. Goel

1 Q What is real-time bidding?

2 A Real-time bidding is a protocol through which
3 publishers and buyers of ad inventory can communicate in
4 order to auction ad space or ad impressions in a fraction of
5 a second in real-time.

6 Q And when did real-time bidding come into place?

7 A So it came into place around 2009. We were among the
8 first, if not the first, to work on a specification with
9 certain buyers to move this ad network waterfall process
10 towards this real-time bidding capability or technology.

11 Q And was real-time bidding considered an innovation at
12 that time?

13 A Yes, it was.

14 Q And what was innovative about it?

15 A So the couple of things that were innovative about it,
16 we talked earlier about some of the challenges with the
17 waterfall where it's difficult to update the sequencing and,
18 therefore, maximize publisher yield. There's a high degree
19 of latency, and the defaulting process for when ad network
20 passes the impression back to the publisher, it removes a
21 lot of the data that can destroy value. Real-time bidding
22 solves all of those problems.

23 Q And you indicated that you worked with others in the
24 industry. Can you tell us who else was involved in working
25 with you on real-time bidding protocols?

Direct Examination - R. Goel

1 A Sure. I recall working specifically with a couple of
2 companies, Invite Media and MediaMath, in developing the
3 specification. I think they were also focused on trying to
4 solve the same problem from the advertiser or the ad agency
5 perspective, which is more inventory, more data about the
6 inventory in order to drive more for advertisers in solving
7 the latency problem so that there could be a good user
8 experience around the ads.

9 Q And subsequent to you working with Invite Media on
10 real-time bidding protocols, did Invite Media get acquired?

11 A They did, yes.

12 Q Who acquired them?

13 A Google acquired them, I believe in 2009.

14 Q Did that become part of Google's DV360 product?

15 A Yes, it did.

16 Q Now, were there any industry organizations involved in
17 the development of protocols for real-time bidding?

18 A Not at that time, but later the IAB, Interactive
19 Advertising Bureau, which is one of the standards-setting
20 bodies in our industry, did take over the real-time bidding
21 protocol and standardize it across the industry.

22 Q So as of the time that Google acquired DoubleClick and
23 then relaunched AdX as an ad exchange, were you and other
24 participants in the industry using real-time bidding?

25 A Yes, we were.

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1 Q And was there a period of time when the real-time
2 bidding that you used was proprietary?

3 A Yes.

4 Q And when did real-time bidding become -- when and how
5 did real-time bidding become subject to open source?

6 A Yeah. I don't recall exactly the time frame, but it
7 would have been a couple of years after we did the first
8 real-time bidding transactions in 2009.

9 Q Okay. And why did you make the decision to make the
10 real-time bidding open source?

11 A Yes. So we decided to move to an industry standard
12 protocol for real-time bidding for a couple of reasons.

13 One is when we had a proprietary specification, or
14 API, with each buyer, it became expensive and cumbersome to
15 maintain that. So if we wanted to make an upgrade, offer
16 some new data or a new ad format, we had to do that in a
17 variety of different proprietary implementations.

18 Second, we felt that, by standardizing the
19 protocol, there would be a significant growth in volume,
20 which would create opportunity for ourselves and many others
21 in the industry.

22 Q And do you know when the open RTB protocol was
23 launched?

24 A I do not remember exactly when.

25 Q Are you familiar with the term "open web" as it refers

Direct Examination - R. Goel

1 to digital advertising?

2 A I am, yes.

3 Q And what does "open web" mean?

4 A "Open web," to me, means the sector of the industry or
5 ecosystem that is distinct from walled gardens where a
6 publisher and advertiser in the open web can choose the
7 technology systems, technology components that they want to
8 use, both to interact with consumers and to deliver
9 advertising.

10 Q And are you familiar with the term "display ad"?

11 A Yes.

12 Q What's a display ad?

13 A A display ad is a type of ad that is shown to
14 consumers, typically a banner or graphical ad of some sort.

15 Q Now, you've been in this industry since approximately
16 2006; is that right?

17 A That's right, yes.

18 Q Okay. So in your more than 20 years in this industry,
19 can you tell us, based on your experience, how is the market
20 for open web display ads different from the market for
21 display ads that might appear on social media?

22 A Sure. So from a publisher's perspective, in the open
23 web the publisher has a direct relationship with the
24 consumer. So the consumer is typically coming to the
25 publisher's properties; the publisher would get to know who

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1 that consumer is, which is important for them in building
2 their business. And then, second, the publisher gets to
3 decide which types of advertising technologies they would
4 use to deliver ads to the consumer.

5 In a walled garden, the walled garden is making
6 those choices. So the content is served typically through
7 the walled garden's platform. The publisher would not
8 interact directly with the consumer. And then the
9 technology for delivering ads is decided by the walled
10 garden provider.

11 Q And what about from an advertiser's perspective? How
12 are open web display ads different from display ads on
13 social media?

14 A So similar to the publisher from an advertiser
15 perspective, the advertiser does not have control over the
16 advertising technology components that are used. They use
17 the walled gardens technology, which is typically a
18 proprietary spec that is involved. Little to no data comes
19 out of the walled garden, so data about how the consumer
20 interacted with ads.

21 And then, third, the advertiser would not have the
22 ability to know who is the consumer, typically, that is
23 interacting with the ad.

24 Q I want to turn now to the subject of ads on mobile
25 apps. Even if the ad looks identical to the ad on a

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1 website, how, if at all, is the market for display ads on an
2 open website different from a display ad on an application
3 on your mobile phone?

4 A So there's a couple of ways that they are distinct.
5 First of all, the ad formats are generally different. We
6 have a very different size of physical screen, which
7 typically requires a different size of ad.

8 The data available for targeting the ad is quite
9 different because we're in an app environment rather than in
10 a browser environment.

11 And then, third, the rendering of the ad -- so the
12 drawing of the ad on the screen -- is also different.

13 Q And you said the data available for targeting is
14 different.

15 Can you explain why that is?

16 A Sure. So the browser environment is just a physically
17 different environment than the app environment, and the app
18 environment tends to be controlled by a couple of large app
19 providers, like Apple or Google -- or sorry -- I should say
20 hardware and software providers, so operating system and
21 device providers, like an Apple or a Google.

22 Q Now, let's again talk about it from the advertiser's
23 perspective. How, from their prospective, is advertising a
24 display ad on the open web different from advertising a
25 display ad on a mobile app?

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1 A So similar in the ways that it's different for a
2 publisher, the data that they would use to target and the ad
3 formats that they are purchasing typically or in many cases,
4 the objective of a mobile app ad is different than it is in
5 open web, which is to say many mobile app advertising
6 campaigns have the primary goal to be app installer app
7 downloads. So they want the consumer to download an app.

8 So if you think about, like, a gaming app, for
9 instance, that might be advertising, their goal is to get
10 the consumer to download an app. That is usually not the
11 case or almost never the case in the open web.

12 Q Now, let's talk about in-stream video ads. What's the
13 difference between an in-stream and an out-stream video ad?

14 A So an in-stream video ad sits within a stream of video
15 content. So it could be at the beginning, which is called a
16 preroll ad; in the middle, which is called a midroll ad; or
17 at the end, which is a postscroll ad; or some combination of
18 all of those.

19 That in-stream ad is an interruptive ad
20 experience, meaning the consumer has to wait on the ad to
21 get access to the contents.

22 In contrast, an out-stream ad would be a video ad
23 that is in between texts, and so it's noninterruptive. The
24 consumer can simply scroll right past the ad.

25 And then a third way that it's different is the

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1 engagement level with the ad is typically different. So an
2 out-stream ad, typically, is sound is off, whereas an
3 in-stream ad, by definition, needs to have sound on. So the
4 sound combined with interruptive and combined with the video
5 canvas means it's a much higher engagement ad opportunity,
6 and advertisers typically pay significantly more.

7 Q In your experience, how is the market for open web
8 display ads different for these in-stream video ads we've
9 just been talking about?

10 A Yeah. As I said, the ad engagement is typically quite
11 different, and so the price point that is demanded for that
12 type of ad or that advertisers are willing to pay is
13 typically 2 to 4 x what they're willing to pay for an open
14 web display ad.

15 Q How, if at all, is the market for tools necessary to
16 display or show -- I shouldn't say display -- show in-stream
17 video ads different than the tools needed to sell open --
18 buy or sell open web display ads?

19 A So some of the tools are similar, and some of the tools
20 are different. For instance, the creation of the ad
21 creative, that is, of course, quite different for a video ad
22 versus a display ad.

23 The buying and selling tools. So a demand-side
24 platform or an exchange, those tools, the specific
25 technology for a video ad versus a display ad are different.

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1 Sometimes they're provided by similar or the same providers.

2 Q Now, I want to talk now. We talked a little bit about
3 Google's DV360. Is that referred to as a demand-side
4 platform?

5 A That is correct.

6 Q And what is a demand-side platform?

7 A A demand-side platform is a software platform that
8 advertisers or agencies use to bid on ads, typically in real
9 time.

10 Q And in your experience, what is the difference between
11 a demand-side platform and an advertiser ad network?

12 A So from a business model perspective, the DSP is almost
13 always an agent for the buyer, for the advertiser or the ad
14 agency. So they are operating a software platform or
15 allowing the advertiser or agency to operate a software
16 platform to buy ads, whereas the ad network model is a
17 principal model or arbitrage base model. As a result of
18 that, then the technology evolves different.

19 Q And based on your experience, do different advertisers
20 tend to gravitate more toward one or the other, the DSP or
21 the advertiser ad network?

22 A Yes.

23 Q And can you describe that phenomenon?

24 A Typically, larger advertisers will gravitate towards
25 demand-side platforms. So advertisers that are spending

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1 significant amounts of money, tens to hundreds of millions
2 of dollars a year; whereas smaller advertisers will
3 typically use an ad network.

4 Q And why is that?

5 A Because there are differences in the technology and the
6 sophistication of users behind that technology. So if you
7 spend a lot of money on advertising -- let's say a Fortune
8 100 advertiser -- they would typically invest in building
9 out a team, building out processes, building out workflow,
10 data stores, databases in order to operate the software and
11 optimize it on their own behalf.

12 A small advertiser -- so think about like a local
13 retailer or a sandwich shop -- they do not have that type of
14 sophistication, and they're looking really for ease of use.
15 So they will use a larger technology company that provides
16 them with a different set of technology tools.

17 Q Okay. And are Google's advertiser ad network, Google
18 Ads, and Google's DSP, DV360, are those -- do those entities
19 use your index, your exchange, PubMatic?

20 A Yes, they do. They're integrated into the PubMatic
21 exchange.

22 Q So how would you characterize PubMatic's overall
23 relationship with Google, looking all the way across the ad
24 tech products?

25 A They're both partner and competitor. So Google Ads and

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1 DV360, as you mentioned, they integrate in and they buy
2 inventory on our platform. So they're an important partner
3 for us.

4 Their bids, ultimately, after we run an auction,
5 we submit into the publisher's ad server, and DFP or
6 DoubleClick for publishers -- or Google Ad Manager, as I
7 believe it's called now -- is the primary ad server across
8 our customer base.

9 So in that layer of the technology, we compete
10 with Google.

11 Q And do you compete against Google's ad exchange?

12 A Correct, yes.

13 Q Now, are there any challenges associated with working
14 with an entity that's both a partner on one side and a
15 competitor in a different product?

16 A Yes, there are significant challenges with that.

17 Q Can you give us some examples of those?

18 A Sure. So on the one hand in the area of the business
19 with which we partner with Google, we want to share
20 information, share insights, talk about what's working well
21 or maybe innovation ideas.

22 On the other hand, we would not want those ideas
23 or that insight to flow into the competitive areas of the
24 PubMatic-Google relationship.

25 Q And to your knowledge, what entity owns or operates the

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1 largest publisher ad server used to transact open web
2 display ads?

3 A Google.

4 Q And how many publishers who use PubMatic also use
5 Google as their publisher ad server?

6 A We estimate it's roughly 80 to 90 percent.

7 Q Now, how do you -- how does PubMatic receive bid
8 information from Google's two buy-siding products, the
9 buy-side products, the DV360 product and the Google Ads
10 product?

11 A So we have a single integration or API with Google, and
12 we send a bid request to Google. And they can respond with
13 a bid from either Google Ads or DV360.

14 Q And so that's one API. What is an API?

15 A An API is an application programming interface. It is
16 a language or protocol through which two or more computer
17 systems can interact.

18 Q Okay. And so your computer system at PubMatic
19 interacts with Google's computer system through an API?

20 A That's correct.

21 Q And the Google Ads advertisers can bid through that
22 API; is that right?

23 A That's right.

24 Q And the DV360 advertisers can also bid through that
25 API; is that right?

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1 A That's right.

2 Q Okay. Can Google -- can PubMatic -- does PubMatic have
3 an API that connects to Google's publisher ad server, DFP?

4 A We do not.

5 Q Why not?

6 A We have asked Google for an API, but they have not
7 granted us an API or access to such an API.

8 Q All right. We'll talk more about that in a bit.

9 Approximately how many open web display
10 transactions does -- from Google Ads does PubMatic see in a
11 given year or a given time period?

12 A Sure. So in a recent month, we sent about -- we sent
13 over 10 trillion ad -- or bid requests to Google in a month.

14 Q You sent 10 trillion bid requests in one month?

15 A That's correct.

16 Q Okay. And approximately how many impressions did
17 PubMatic -- did Google's buy-side products purchase using
18 PubMatic?

19 A The Google win rate was below 1 percent.

20 Q And why do you think that is?

21 A It's not uncommon, I think, due in part to header
22 bidding. Publishers use multiple SSPs or exchanges. And so
23 there's a proliferation of ad impressions and ad inventory
24 as a result.

25 Q Okay. So how would you characterize the number of

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1 impressions that PubMatic gets from Google Ads -- actually,
2 won impressions from Google Ads in a given time period?

3 A It's a small percentage of the total. So DV360 is the
4 vast majority.

5 Q Okay. DV360 is the vast majority of the --

6 A Sorry. Of the total Google pie, that is one, yes.

7 Q Okay. Understood.

8 And was there a period of time in which Google
9 Ads, based on your experience, refused to purchase any open
10 web display ads on PubMatic?

11 A Yes, there was.

12 Q And when was that?

13 A Up until about 2014.

14 Q Now, if Google Ads stopped purchasing open web display
15 transactions on PubMatic, could PubMatic turn to Amazon or
16 Facebook instead?

17 A No, we could not.

18 Q Why not?

19 A Facebook is not integrated into PubMatic. So they do
20 not buy on our platform. They do not buy ads in the open
21 web generally. Amazon primarily buys its own supplier, its
22 own inventory, not exclusively but primarily. So, for
23 instance, Amazon -- ads that appear on Amazon.com or some of
24 their other properties.

25 Q And based on your experience in the industry, do you

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1 have an understanding as to how AdX's take rates for open
2 auction display compared to PubMatic's take rates for open
3 auction display?

4 A I don't have certainty as to Google AdX's take rate,
5 but my belief is that it's higher than PubMatic's.

6 THE COURT: I'm sorry. It's what?

7 THE WITNESS: Higher than PubMatic.

8 MS. WOOD: So, Your Honor, for confidentiality
9 reasons, I don't believe we need to close the courtroom at
10 all, but I would just ask that counsel, the Court, and
11 witness look at a document but it not be displayed.

12 THE COURT: All right. What's the exhibit number?

13 MS. RHEE: Your Honor, if it's what's in this
14 binder, there's going to be an objection for lack of
15 foundation.

16 THE COURT: Let me take a look.

17 MS. WOOD: Well, let me attempt a foundation here
18 before you -- you've already decided I'm not going to lay a
19 foundation?

20 THE COURT: What's the exhibit number?

21 MS. RHEE: If I see the document, Your Honor.

22 MS. WOOD: PTX 1241.

23 BY MS. WOOD

24 Q And, Mr. Goel, can you indicate -- do you recognize in
25 this document, without saying it out loud, a trend line that

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1 represents the open auction take rates for PubMatic?

2 THE COURT: Well, wait. We have no idea where
3 this came from.

4 MS. RHEE: Objection, Your Honor.

5 THE COURT: All right. So we got to lay a better
6 foundation than that.

7 MS. WOOD: Okay. I can represent to the Court
8 that this came from Professor Lee's report. And you'll be
9 hearing from Professor Lee, and he'll be describing how this
10 came about.

11 THE COURT: Then he's the one who will testify to
12 it.

13 MS. WOOD: Okay. I just wanted this witness,
14 while he was here, to confirm the take rate amount. But if
15 it comes in through Lee, that's fine.

16 THE COURT: If it's part of his work as an expert,
17 that's a different situation.

18 So move on.

19 MS. WOOD: Okay. Understood.

20 BY MS. WOOD

21 Q Now, we talked a little bit about this before. Google
22 launched its AdX product after PubMatic launched its,
23 correct?

24 A I believe so, yes.

25 Q And how would you characterize AdX's size in the market

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1 for open web display compared to PubMatic's, in your own
2 words?

3 A We estimate that Google has a roughly 50 to 55 percent
4 market share, whereas our market share is in the 4 to 4
5 1/2 percent range.

6 Q Okay. Can you describe to the Court in your own words,
7 what is it like to compete against Google's ad exchange in
8 the market for open tools that buy and sell open web display
9 transactions?

10 A It's certainly a challenge. It keeps us on our toes in
11 terms of pace of innovation, speed, nimbleness, customer
12 service. The biggest challenge, of course, is that Google
13 has more demand flowing through its platform than anybody
14 else, in my opinion. And publishers really care about
15 revenue or monetization.

16 Q Now, based on your knowledge and experience in the
17 industry and your regular communications with publishers, do
18 you have an understanding of any superior features or
19 functionalities that AdX offers that PubMatic does not?

20 A I do not hear from our publishers that there are
21 certain feature sets that AdX has that we do not have.
22 There are no features on our road map -- on our product road
23 map that are designed to close feature or functionality gaps
24 relative to AdX.

25 But, again, I would say that, for publishers, the

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1 number one, two, and three priority is driving revenue or
2 driving monetization for their ad inventory, which, of
3 course, Google is in a superior position to do given their
4 market size.

5 Q Now -- so based on your experience in the industry,
6 what do you think accounts for Google's larger size in the
7 market for ad tech tools for open web display relative to
8 PubMatic?

9 A Well, I think many publishers that use DFP are using it
10 certainly in part because of the demand that comes from
11 Google.

12 Q And the demand you're referring to is demand from
13 Google Ads ad network?

14 A Correct. So we talked earlier about the share of
15 monetization that we see from Google that is Google Ads
16 versus DV360. Many years ago it used to be about half and
17 half. So the share that Google Ads represents has reduced
18 significantly over the years.

19 Q Now, we talked a little bit about the waterfall method
20 and -- was that waterfall method continued to be the primary
21 means by which open auction, remnant, or indirect open web
22 display transactions were sold prior to the advent of header
23 bidding?

24 A Yes.

25 Q And are you familiar with the term "first look"?

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1 A Yes, I am.

2 Q Can you describe to the Court what first look is?

3 A Sure. First look is an approach to monetization where
4 a single party has the ability to evaluate a piece of
5 inventory and purchase it before any other party has an
6 opportunity to evaluate it.

7 Q And from your perspective as an industry participant,
8 was first look a positive or a negative for publishers?

9 A From a publisher's perspective, in every scenario, I
10 believe it would be a negative.

11 Q Why?

12 A Well, because it's not giving the publisher a fair or
13 competitive price. There may be another buyer that's
14 willing to pay more for the inventory, and the publisher
15 would have no way of finding that out or discovering that or
16 generating that revenue.

17 Q And what about from an advertiser's perspective? Would
18 you say that first look was good, bad, or indifferent?

19 A Bad in that it would lead to an inefficient market
20 where an advertiser that wanted to pay more for a particular
21 ad impression because they believed they could generate
22 higher ROI from that ad inventory would be unable to
23 purchase that inventory.

24 Q Why would they be unable?

25 A Only if they were working exclusively with the owner of

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1 the first look capability would they be able to purchase
2 that inventory.

3 Q And from your perspective as an industry participant,
4 was first look good or bad for competition in the market for
5 ad exchange tools for open web display?

6 A It suppressed competition.

7 Q Why do you say that?

8 A Well, anybody without the first look capability would
9 be unable to build a liquid market against that inventory.

10 Q Are you familiar with -- I think you indicated before.
11 Are you familiar with Admeld?

12 A Yes.

13 Q Was Admeld sometimes referred to as Yield Manager?

14 A Yes, it was.

15 Q And are you familiar with the fact that Google acquired
16 Admeld?

17 A Yes.

18 Q I want to turn now to a document that has been marked
19 for identification as PTX 36. You can look at it in your
20 binder. It may also come up on the screen next to you.
21 Whatever is more convenient.

22 A Okay.

23 THE COURT: Is there any objection to 36?

24 MS. RHEE: No objection, Your Honor.

25 THE COURT: All right. I assume you're moving it

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1 in?

2 MS. WOOD: Yes, Your Honor.

3 THE COURT: It's in.

4 MS. RHEE: Your Honor, I think no objection
5 particularly for purposes of just establishing the fact of
6 the communication rather than for the truth of the matter
7 asserted. Otherwise, it would be hearsay and out-of-court
8 statement.

9 MS. WOOD: Your Honor, I would agree with the
10 respect to the bottom email. The top email is a statement
11 of a party opponent. It was a statement by Mr. Mohan of
12 Google. So I do believe the top email comes in for the
13 truth of the matter, whereas the bottom email is an effect
14 on the hearer or the fact that the communication was made.

15 MS. RHEE: And, again, no objection, but certainly
16 at the top of the email, Mr. Goel is nowhere to be found on
17 that. And that's an internal Google communication.

18 MS. WOOD: I still think it can come in for the
19 truth of the matter for the Court.

20 THE COURT: What's Mr. Mohan's position at Google?

21 MS. WOOD: Shall I answer?

22 THE COURT: Ms. Rhee?

23 MS. RHEE: At that point in time in 2009, he had
24 come over as part of the DoubleClick acquisition to have a
25 role in the display and video ads business. He eventually

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1 arose -- I don't know exactly what time in that period -- to
2 run the video and ads display business.

3 MS. WOOD: Your Honor, I'll note two things.

4 One, Mr. Mohan will be here in person Monday
5 morning.

6 And, two, he was a senior executive.

7 But also, three, I believe under clear Fourth
8 Circuit precedent, an employee of any rank within an
9 organization, as long as they're acting within their
10 employment, it's still a statement of the party opponent.
11 It doesn't matter on the rank.

12 THE COURT: I'm going to overrule the objection,
13 especially because he's going to be here.

14 MS. WOOD: Thank you, Your Honor.

15 BY MS. WOOD

16 Q Do you recognize the bottom email from Mr. Amar Goel?
17 Is that your brother?

18 A Yes, it is.

19 Q Okay. And you see you're copied there as well?

20 A Correct. Yes.

21 Q He writes to Neal Mohan. Did you know Neal Mohan in
22 January 2009?

23 A Yes, I did. I knew him actually from his DoubleClick
24 days.

25 Q And how did you know him?

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1 A I knew him professionally, and I know him personally as
2 well.

3 Q Okay. And your brother knows him as well?

4 A That's correct.

5 Q Okay. And it says, "Neal, hi. How's it going?"

6 And this would have been right after the
7 DoubleClick merger, correct, or acquisition?

8 A I believe that's right.

9 Q Okay. "Neal, hi. How's it going? We were wondering
10 if there might be some ways to integrate PubMatic into
11 DoubleClick via your APIs."

12 Do you see that?

13 A Yes.

14 Q Those are the same APIs we talked about before, a
15 connection between one computer system and another computer
16 system?

17 A That's correct.

18 Q And why was PubMatic interested in connecting to
19 DoubleClick's APIs at this time in January 2009?

20 A Well, part of our vision to deliver yield optimization
21 or yield management to publishers was to be able to see the
22 direct sold inventory that's sitting in the ad server, ads
23 that are sold via an insertion order, and combine that with
24 the remnant ad inventory and give publishers the opportunity
25 to optimize or manage yield across both sets of inventory.

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1 Q And, ultimately, in response to this email, did you
2 ever get a response back from Mr. Mohan about whether
3 DoubleClick and Google would be willing to connect to
4 PubMatic via an API?

5 A We were not granted access.

6 Q You were not granted access. Were you given a reason?

7 A No.

8 Q Was this the only time you ever sought API access to
9 Google's DFP product?

10 A No. We sought access a number of times.

11 Q Approximately how many times?

12 A Probably a half dozen.

13 Q And were you ever given access on an API basis to
14 Google's DoubleClick for Publisher product?

15 A No.

16 Q Why not?

17 A I don't know.

18 Q How would have that access between PubMatic and
19 Google's DFP helped PubMatic?

20 A Well, at that time, as programmatic advertising was
21 increasing as a share of total digital advertising, there
22 was no way to fully yield optimize or yield manage across
23 direct sold and unsold inventory. And that was our goal,
24 was to be able to deliver that to publishers.

25 And so not having that ability meant that we could

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1 not manage 100 percent of the inventory of a publisher,
2 which limited the scope of our business as a result.

3 Q And was it your expectation that having an API between
4 PubMatic and Google's DFP publisher ad server product would
5 have benefited publishers?

6 A Yes.

7 Q How so?

8 A Well, it would have give them the ability to optimize
9 the yield across all of that inventory. So, for instance, a
10 publisher might sell, on a direct basis via an insertion
11 order, a \$10 CPM campaign; but they might have, via an ad
12 network or programmatically via real-time bidding, a \$15 CPM
13 bid from an advertiser.

14 And, historically, the way a publisher would
15 manage that in the waterfall is the \$10 IO would serve
16 before the \$15 bid ever materialized. And that meant that
17 publishers were leaving money on the table.

18 And so our goal was to help publishers see that,
19 realize that, and grow the value of their inventory.

20 Q And at that time period in 2009, would PubMatic have
21 been able to offer real-time bids into DFP's publisher ad
22 server.

23 A At some point in 2009, yes. I don't recall exactly
24 when. This email is dated in January; so it may have been a
25 little bit later that year.

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1 Q But it would have been in 2009?

2 A Yes.

3 Q And how you would you characterize to the Court the
4 level of technical difficulty, if any, required to have an
5 API between DSP and PubMatic?

6 A I would rate the level of difficulty as low to
7 moderate.

8 Q And can you describe what's involved in developing an
9 API between PubMatic as an exchange and a DFP like -- a
10 publisher ad server like DFP?

11 A Sure. There's definitely effort involved to build the
12 API, build the documentation, to test it and to scale it.
13 So it's not without effort, but it's not a complicated
14 effort. In fact, we have API integrations and access into
15 several other ad servers. Typically, it takes us three to
16 six months to integrate and test such an integration.

17 Q And how you would you characterize the cost associated
18 with doing that?

19 A Yeah, that would be three to six months for a handful
20 of engineers, maybe five to seven. So we're talking about
21 less than half a million dollars.

22 Q And then are there circumstances in which, when you
23 want an API with another computer system that's part of the
24 ad tech ecosystem, that you as the person that's seeking the
25 API pays for their costs to do the API as well?

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1 A That is a possibility, yes.

2 Q Okay.

3 MS. WOOD: Your Honor, I'm conscious of the time.
4 I'm happy to go on. I've got about another 15 to 20
5 minutes, but we could also take our break. I'd ask the
6 Court's --

7 THE COURT: Let's go till quarter after.

8 MS. WOOD: Okay. Great.

9 BY MS. WOOD

10 Q Was there a time in which PubMatic decided to offer its
11 own publisher ad server?

12 A Yes.

13 Q Why did you do that?

14 A We were focused on the mobile app -- growth in the
15 mobile app market. And so we acquired a company called
16 Mocean Mobile with the intent of offering a mobile app ad
17 server. We did not focus on the display market because we
18 did not think that we could make inroads into having
19 publishers switch their ad server.

20 Q Why did you think you couldn't break into the open web
21 display market but you could break into the mobile app
22 market?

23 A So Google, with the acquisition of DoubleClick, had,
24 you know, clearly built a level of dominance in the display
25 ad market. And given the ad exchange monetization tie-in,

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1 we did not think we would be successful in having publishers
2 replace DFP with a PubMatic ad server.

3 However, in the mobile app ad space, that was a
4 new and burgeoning space. Mobile app devices came much
5 later -- or mobile devices, including then-app interfaces
6 came much later than, you know, browser-based internet
7 advertising. And so we felt that there was greenfield
8 opportunity in the mobile app space.

9 Q And what was the name of the mobile app publisher ad
10 server you launched?

11 A Unified ad server.

12 Q And did you view that to be a competitor of DFP?

13 A On some level, yes, although we didn't see that DFP
14 was -- or DoubleClick was significantly focused on the
15 mobile app market in particular at that time.

16 Q And, ultimately, is unified ad server still operating
17 today?

18 A No, it is not.

19 Q How long was it operating?

20 A It was operating for a couple of years. We were not
21 successful, and so we shut down that initiative.

22 Q Okay. Now, did PubMatic ever try to use AdX direct to
23 try to connect to a dual ad server system?

24 A I don't recall.

25 Q Okay. Now, I want to turn now to PTX 1677.

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1 Do you recognize PTX 1677?

2 A I do, yes.

3 THE COURT: Any objection?

4 MS. RHEE: Your Honor, it would be hearsay insofar
5 as it's being admitted for the truth of the matter.

6 MS. WOOD: I can lay a foundation for the hearsay
7 exception.

8 THE COURT: All right. Go ahead.

9 BY MS. WOOD

10 Q What do you recognize PTX 1677 to be?

11 A It is a white paper that we put out to existing
12 customers and to prospects.

13 Q And was this prepared at PubMatic at or around the time
14 by persons with knowledge of its content?

15 A Yes.

16 Q And was it prepared in the normal course of PubMatic's
17 business?

18 A Yes.

19 MS. WOOD: We believe this meets the standard for
20 a business record of PubMatic and would ask for its
21 admission for the truth.

22 THE COURT: And the audience for this was
23 potential customers or current customers?

24 THE WITNESS: Both. So both potential and current
25 customers.

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1 THE COURT: Well, I'm going to let it in with the
2 caveat that a lot of these have a certain degree of puffery
3 because they're open. So, you know, it is what it is. All
4 right?

5 MS. WOOD: Understood, Your Honor.

6 THE COURT: Go ahead.

7 BY MS. WOOD

8 Q What is this announcement or this white paper
9 discussing?

10 A This white paper is discussing or attempting to educate
11 publishers about the opportunity for header bidding and how
12 they could use header bidding to generate more revenue than
13 the then-current methods of monetizing unsold ad inventory.

14 Q And if you turn to the page -- page 4 of the actual
15 slide deck, do you see the numbers?

16 A I do, yes.

17 Q Do you see there on the left-hand side the numbers 1,
18 2, 3?

19 A Yes, I do.

20 Q And what are these describing to your customers or
21 potential customers?

22 A Sure. So prior to header bidding or -- to set a little
23 bit of context, the reason for header bidding to come into
24 being is that publishers wanted to use auctions with other
25 exchanges other than AdX while also not losing access to the

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1 demand that flows through AdX.

2 And so header bidding came into being as a
3 technical approach to allow parallel auctions where a
4 publisher could flow the same ad impression into multiple ad
5 exchanges, which would allow the publisher to bring demand
6 in from non-Google ad exchange in addition to availing
7 themselves of Google ad exchange demand.

8 Q And do you see the title here? It says, "Many
9 third-party solutions have set out to solve for the
10 efficiency and control issues in waterfalling, which often
11 lead to lost revenue."

12 Do you see that?

13 A Yes, I do.

14 Q Okay. And then below that are some of the reasons why
15 the waterfall is inefficient and there's no control and
16 there's lost revenue?

17 A Correct, and some of the points that we discussed
18 earlier.

19 Q Exactly. So in the interest of moving on, let's go to
20 the next page, page 7. And if you see the big blue box,
21 underneath that, in small print, it reads, "While EDA may be
22 effective for many publishers, it favors AdX, which reduces
23 the competition on a publisher's inventory."

24 And then it says, "This creates inefficiencies in
25 yield monetization in a couple of significant ways."

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1 And then they are described below. Do you see
2 that?

3 A I do, yes.

4 Q Can you explain what that's referring to.

5 A Sure. So EDA refers to enhanced dynamic allocation,
6 which is a iteration or second release from Google on top of
7 dynamic allocation.

8 And what it did is it allowed Google's AdX to
9 submit a real-time bid into the publisher ad server via
10 enhanced dynamic allocation, or EDA, but no other exchange
11 could do such a thing.

12 And so the result is that EDA would perform
13 better, all things being equal, than any other exchange.

14 Q And then under Number 1 it says, "AdX gets first look
15 and right to win." Do you see that?

16 A I do, yes.

17 Q Can you describe what that refers to.

18 A Sure. So AdX gets the right to monetize the ad
19 impression if they have a buyer regardless of the price --
20 maybe there's a price floor that a publisher could set --
21 but without the publisher being able to look at bids from
22 other exchanges.

23 Q And what, if anything, was significant about that fact?

24 A Well, I think there's two things of significance.

25 Number one is that publishers were not able to maximize the

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1 revenue or yield for their inventory.

2 And then second, it built an advertiser dependence
3 on Google's stack because advertisers knew that if they were
4 not bidding inside of AdX, then they were not getting the
5 first look. And the first look often performs best from an
6 advertiser's objectives.

7 Q And then you see on the right-hand side there's some
8 text in blue. And the last sentence reads, "AdX is also
9 able to submit a real-time bid with EDA so historical CPMS
10 can be matched in real time."

11 Do you see that?

12 A I do, yes.

13 Q Now, at the time this document was created, PubMatic
14 could certainly do real-time bids as well, correct?

15 A Yes. We had been for five to six years at that point.

16 Q Okay. So if Google had allowed an API into DFP,
17 PubMatic could have also had a real-time bid; is that right?

18 A That's correct.

19 THE COURT: Speaking of time, I think now we'll
20 take our afternoon break until 4:30.

21 (The time is 4:14 p.m.)

22 (Brief recess taken.)

23 MS. WOOD: May I proceed, Your Honor?

24 THE COURT: Yes, ma'am.

25 BY MS. WOOD:

Direct Examination - R. Goel

1 Q Before the break we were talking about first look and
2 the waterfall system and the advent of header bidding.

3 After header bidding came into play, are you
4 familiar with the phenomenon referred to as last look with
5 respect to header bidding auctions and the DFP publisher ad
6 server's connection to AdX?

7 A Yes.

8 Q Can you describe what that is?

9 A Yeah. Last look, in this context, is Google's ability
10 to look at all of the other bids that are coming in for
11 publisher's inventory in AdX and then submit their own bid
12 after looking at all of the other bids.

13 Q And did you believe, based on your experience in the
14 inventory, that last look was good for publishers?

15 A No.

16 Q Why not?

17 A It's hard to imagine any scenario where last look would
18 be good for publishers. Typically, a bidder for inventory
19 would submit the highest bid that they felt comfortable
20 paying in order to win inventory. So a last look, an
21 ability to see all the other bids, would afford the party
22 with the last look with the opportunity to just bid 1 cent
23 more, which would clearly harm publishers.

24 Q What about from the perspective as a competitor ad
25 exchange to AdX? Did you feel that Google's last look was

Direct Examination - R. Goel

1 fair competition?

2 A No. I think it affords two significant advantages --
3 one is scale and the other is margin.

4 So from a scale perspective, any party with last
5 look will win more auctions, and that creates a dependency
6 from an advertiser and a publisher perspective or perceived
7 dependency on that technology platform. So those buyers and
8 publishers will tend to use that platform more because it's
9 viewed to monetize a greater proportion of inventory.

10 And then second, with respect to margin, depending
11 on how the last look is implemented, if the platform
12 implementing last look is able to pocket the difference
13 between the 1 cent over the next highest bid and what the
14 advertiser was willing to bid, they could increase their
15 margin significantly.

16 Q And those concepts you just discussed, scale in
17 particular, how would you characterize the endurance of
18 scale in the ad tech ecosystem?

19 A I think to be relevant, scale is important. Scale
20 begets data. Data begets performance. And performance, in
21 turn, begets more scale. So there's a virtual cycle that
22 one can establish and that one needs to establish in order
23 to cement publisher and advertiser relationships.

24 Q And how would you describe the enduring effect of
25 scale, if at all?

Direct Examination - R. Goel

1 A Can you clarify? What context?

2 Q Yeah. Is scale, in your mind, temporary? You have
3 scale for a while and then it just goes away? Or can the
4 scale effects in the ad tech market endure past the conduct
5 at issue?

6 A I think scale is always something that any provider in
7 our industry has to focus on, you know, continuously growing
8 their scale, managing their scale, and making sure they have
9 enough scale of ad impressions, of data, of advertiser bids
10 in order to stay relevant.

11 Q Have you ever heard the term "network effects"?

12 A Yes.

13 Q What are network effects as they apply in the ad tech
14 ecosystem?

15 A Sure. A network effect in the ad tech ecosystem is an
16 effect where the more parties use a particular platform or
17 system, the more value or utility all users get from that
18 platform.

19 So in this case, when I referred to scale
20 begetting data, data begetting performance, that's an
21 example of a network effect.

22 Q Okay. Now, are you familiar with Google's open bidding
23 program?

24 A Yes.

25 Q Was that also called exchange bidding at some point?

Direct Examination - R. Goel

1 A I believe so, yes.

2 Q And does PubMatic participate in Google's open bidding?

3 A We do.

4 Q And does Google charge a fee for exchanges like
5 PubMatic to participate in open bidding?

6 A They do charge a fee.

7 Q And what is it?

8 A I believe it's in the 5 to 10 percent range, depending
9 on the ad format.

10 Q And from PubMatic's perspective, what disadvantages are
11 there, if any, from participating in open bidding versus,
12 let's say, a header bidding auction?

13 A We often participate in multiple auctions with the same
14 publisher. It could be a Prebid header bidding auction as
15 well as an open bidding auction.

16 There are some advertisers that will not bid into
17 Google open bidding. So it's important that we have more
18 than just open bidding.

19 Q And how does Google's imposition of a 5 percent fee on
20 PubMatic in connection with open bidding impact open
21 bidding -- PubMatic's ability to compete in the open bidding
22 market?

23 A So it reduces the net bid. So, for instance, if we
24 have a \$1 bid, we have to subtract out Google's open bidding
25 fee, so 5 to 10 cents, if I recall correctly. So that would

Direct Examination - R. Goel

1 mean the bid that we provide to the publisher is 90 cents or
2 95 cents. I do not believe that Google assesses this own
3 fee on their demand.

4 Q And so what does that do to your bid relative to the
5 AdX bid?

6 A It disadvantages our bid, which means we win less.

7 Q Now, are you familiar with Google's implementation of
8 unified pricing rules on publishers and the DFP product?

9 A Yes.

10 Q And what was unified pricing rules, as you understand
11 it?

12 A As I understand it, unified pricing rules, or UPR, is a
13 limitation that Google introduced some years ago where a
14 publisher could not put a higher price floor on Google AdX
15 demand than they did on other SSPs or exchanges.

16 Q What impact, if any, did Google's UPR rule have on
17 PubMatic's ability to compete?

18 A It lowered our revenue somewhere in the range of 6
19 to 8 percent.

20 Q And why was that?

21 A Well, publishers either knew or believed they knew that
22 Google had certain unfair advantages, and they would,
23 therefore, put a higher price floor on Google AdX.

24 Some of the advantages you mentioned already,
25 things like first look and last look. I know some

Direct Examination - R. Goel

1 publishers that would not put the CPM pricing for insertion
2 orders inside of DFP because they believed that Google would
3 use that pricing against them.

4 And so a publisher would typically put a higher
5 price floor on Google AdX.

6 Q Now, let me show you what we've marked for
7 identification as PTX 1621.

8 THE COURT: Is there any objection to 1621?

9 MS. RHEE: No, Your Honor.

10 THE COURT: All right. It's in.

11 MS. RHEE: Actually, Your Honor, no objection
12 insofar as this is not being admitted for the truth of the
13 matter asserted therein, because otherwise it would be an
14 out-of-court statement.

15 MS. WOOD: Well, I can lay a foundation for the
16 out-of-court statement, Your Honor.

17 THE COURT: Go ahead.

18 BY MS. WOOD:

19 Q What is PTX 1621?

20 A It's an internal email assessing the impact of UPR on
21 our business.

22 Q And does this email -- was it prepared in the normal
23 course of business at PubMatic?

24 A Yes.

25 Q And was it prepared by individuals with knowledge of

Direct Examination - R. Goel

1 the subject matter?

2 A Yes.

3 Q And was it prepared in the normal course?

4 A Yes.

5 MS. WOOD: Your Honor, I believe we've laid a
6 foundation to admit the document.

7 THE COURT: I'm letting it in in part because also
8 this witness is on the distribution list. Companies do do
9 this sort of thing. I'm permitting it. Go ahead.

10 BY MS. WOOD:

11 Q Okay. Do you see the top line, the subject of the
12 email is UPR impact. What is that referring to?

13 A The impact of the rollout of Google's unified pricing
14 rules on our business.

15 Q And the summary line says, "UPR is in the range" -- UPR
16 impact is in the range of negative 10 to negative 3 percent
17 of overall PS."

18 What is PS?

19 A PS is platform spend or the media spend on our
20 platform.

21 Q And it says, "My best guess is negative 6 to negative
22 7 percent."

23 Do you see that?

24 A Yes.

25 Q And who is Samsuddin Ahmed?

Direct Examination - R. Goel

1 A He's a data analyst at PubMatic.

2 Q And was it his responsibility do the data analysis that
3 led to this result?

4 A Yes.

5 Q Okay. Then if you see below, under "Other Points of
6 Interest" -- do you see that at the bottom?

7 A I do, yes.

8 Q And number one says, "UPR impact on different
9 wrappers."

10 Do you see that?

11 A That's correct, yes.

12 Q And it says, "EB declined by negative 18 to negative
13 28 percent."

14 What does that mean?

15 A That means the impact of UPR on publishers where we're
16 bidding through exchange bidding was a decline of 18 to
17 28 percent in platformed spend.

18 Q I'm sorry. I missed the last?

19 A In platform spend.

20 Q In platform spend.

21 And is platform spend important?

22 A It is, yes. It's the value of the media flowing
23 through our platform, and our revenue is a derivative of
24 that number.

25 Q Okay. And then other -- under B, 1B says, "Custom

Cross-Examination - R. Goel

1 wrappers on other GAM publishers."

2 What does that refer to?

3 A So some publishers may have built their own wrapper.

4 So that would be an example of a custom wrapper, where a
5 publisher is using the Google Ad Manager or DFP ad server.

6 Q And it says, "For those publishers, the custom wrappers
7 on other GAM publishers declined by negative 16 to negative
8 26 percent."

9 A That's correct.

10 Q And what -- negative 16 percent to negative 26 percent
11 of what?

12 A Also of platform spend.

13 Q Okay.

14 MS. WOOD: I'll pass the witness.

15 THE COURT: All right.

16 Ms. Rhee, go ahead.

17 MS. RHEE: Thank you, Your Honor.

18 CROSS-EXAMINATION

19 BY MS. RHEE:

20 Q Mr. Goel, my name is Jeannie Rhee. I represent Google.
21 We've never met before, but I'm going to spend a little bit
22 of time now asking you some follow-up questions to the
23 government's examination. Okay?

24 A Great.

25 Q Okay. Now, Mr. Goel, you talked about back in the day

Cross-Examination - R. Goel

1 in 2007 essentially setting up a booth with a video in order
2 to sell your software spec that became PubMatic; is that
3 right?

4 A We weren't selling the spec, but to demonstrate the
5 software, yes.

6 Q And it was prelaunch a demonstration of what you
7 believed the company PubMatic came to be could do; is that
8 right?

9 A That's correct.

10 Q Okay. And in 2007 you testified on direct examination
11 there was no notion of RTB, or real-time bidding, back then
12 in that time frame; is that right?

13 A I do not believe it existed then, correct.

14 Q In fact, your words on direct examination was "There
15 was no notion of real-time bidding back then," correct? You
16 just testified.

17 A Okay.

18 MS. WOOD: Objection, Your Honor. Obviously, the
19 transcript will speak for itself as to his exact words.

20 THE COURT: Let's not object on such things.

21 MS. WOOD: Okay.

22 BY MS. RHEE:

23 Q Correct?

24 A I don't recall every word that I said on direct, but
25 that sounds accurate.

Cross-Examination - R. Goel

1 Q You just testified. So okay --

2 THE COURT: You don't need to worry about it.

3 BY MS. RHEE:

4 Q All right. Now, when you launched, you said the brain
5 child or the genesis of what became PubMatic was to manage
6 or optimize yield across both publishers insertion orders,
7 or their direct deals, and the remnant inventory, the
8 remnant sets of their inventory.

9 Is that right?

10 A Our initial focus was on remnant, and that later grew
11 to also include the direct inventory.

12 Q And this was for publishers to manage their yield
13 across their inventory that was at that point in time
14 primarily being sold to ad networks insofar as it pertained
15 to remnant inventory.

16 That was your testimony, correct?

17 A That's correct.

18 Q Now, you remember on direct examination being asked
19 about a company called Admeld, correct?

20 A Yes.

21 Q And you testified on direct that you called them a
22 yield manager, correct?

23 A Correct.

24 Q And, in fact, what PubMatic was back in that time
25 period when you launched was a yield manager as well,

Cross-Examination - R. Goel

1 correct?

2 A That's correct.

3 Q Now, fast-forward to 2009, and you had been in business
4 for approximately two or so years at that point; is that
5 right?

6 A That's right.

7 Q You were asked on direct examination about PTX 36.

8 And if I could get Mr. Spalding's assistance to
9 pull up the bottom of that email.

10 Now, this date on the email is January 31, 2009,
11 correct?

12 A Correct.

13 Q And, again, you testified on direct examination that
14 real-time bidding, at least as a recent technology even
15 then, did not come online until later in 2009; is that
16 right?

17 A That's right.

18 Q Okay. So when you reached out to Mr. Mohan in January
19 of 2009 -- actually, I apologize. It was your brother who
20 reached out, correct?

21 A That's correct, yes.

22 Q When your brother reached out in January of 2009 to
23 Mr. Mohan, the ask was that PubMatic wanted access through
24 an API integration to DFP, or DoubleClick for Publishers; is
25 that right?

Cross-Examination - R. Goel

1 A That is right.

2 Q And you never had access to DoubleClick for Publishers
3 via any kind of integration, correct?

4 A The only way to integrate was a tag. So we could give
5 a tag to a publisher that they could put into their ad
6 server like any other tech.

7 Q And what you wanted was API integration, correct?

8 A That's correct.

9 Q And you never got API integration; is that right?

10 A I do not believe we did, correct.

11 Q Well, why do you say you do not believe you did?

12 You're the founder and CEO, correct?

13 A Yes.

14 Q And you sit on the board, correct?

15 A I do.

16 Q So you would know whether or not you ever had API
17 integration with DFP for publishers, correct?

18 A I don't recall every fact of the last 18 years.

19 Q So this is not a significant fact?

20 A It's certainly significant today.

21 THE COURT: Just so we're clear, did you -- to
22 your knowledge, did your company ever get API connectivity
23 to the system?

24 THE WITNESS: To my knowledge, no.

25 THE COURT: Okay.

Cross-Examination - R. Goel

1 BY MS. RHEE:

2 Q And it's not the case where PubMatic once had API
3 access to DoubleClick for Publishers and then had it pulled
4 away. PubMatic never had API access to DoubleClick for
5 Publishers, correct?

6 A I believe that's right, yes.

7 Q Not during the DoubleClick days and not when Google
8 acquired DoubleClick, correct?

9 A Correct.

10 Q And your testimony on direct examination is after that
11 January 2009 request, you or your brother or someone else at
12 PubMatic sought access at least a half a dozen more times;
13 is that right?

14 A That's right.

15 Q And the words that you used was "sought access through
16 an API integration." Is that right?

17 A That's right.

18 Q Now, you also testified on direct examination that
19 technical integration would be required in order to have
20 that kind of API access, correct?

21 A Correct.

22 Q Now, you testified on direct that it was your opinion
23 that the difficulty of such technical integration was, in
24 your opinion, low to moderate. That was your testimony?

25 A Yes.

Cross-Examination - R. Goel

1 Q But baked into that testimony was the fact that that
2 kind of API integration required technical resources,
3 correct?

4 A Correct.

5 Q And required work on Google's part in order to make
6 that access through API possible; is that right?

7 A Yes, it would require work by Google.

8 Q Now, you were also asked on direct examination about
9 PTX 1677. So if we could pull that up on the screen and in
10 particular to page 1 that you testified about on direct.

11 So I'm going to try to do this roughly
12 chronologically. So we're moving in time. And this is a
13 2015 document, if I recall correctly, right?

14 A I believe that's right, yes. It's copyrighted 2015.
15 So around that time.

16 MS. RHEE: So now if we could go to -- I'm sorry.
17 It's page 7 with the Figure 2.

18 Sorry, Mr. Klein. Could I get your assistance?

19 Thank you, Mr. Klein, for your assistance.

20 And also, while we're just waiting for it to load
21 up, actually, that's not Figure 2, Mr. Klein. If you go to
22 page 7, there's a Figure 2. The pretty blue box. Thank
23 you.

24 And, Your Honor, apologies, but if I may, just
25 with the Court's indulgence, acknowledge my second chair,

Cross-Examination - R. Goel

1 Annalise Corriveau, who is here assisting.

2 THE COURT: Very good.

3 MS. RHEE: Thank you.

4 BY MS. RHEE:

5 Q Okay. Now, Mr. Goel, you see this Figure 2 in front of
6 you that you talked about on your direct examination,
7 correct?

8 A I do, yes.

9 Q Okay. Now, you talked about how dynamic allocation and
10 enhanced dynamic allocation were Google features, correct?

11 A Correct.

12 Q Now, here, what this talks about is, through dynamic
13 allocation and enhanced dynamic allocation, Google -- I
14 apologize -- Google basically found a way to address the
15 inefficiencies of the waterfall method that you talked about
16 on direct exam, correct?

17 A I don't know that it was designed to address the
18 inefficiencies of the waterfall.

19 Q But it did address the inefficiencies of the waterfall,
20 correct?

21 A Like I said, I don't know that it was designed or did
22 address --

23 Q That's not my question, Mr. Goel. The question is not
24 whether it was intended to do something, but it did address
25 the inefficiencies of the waterfall, correct?

Cross-Examination - R. Goel

1 A I do not believe it addresses all of the --

2 Q That's not my question --

3 A -- inefficiencies of the waterfall.

4 Q -- about all of the inefficiencies. Let's try this
5 again.

6 The question is you testified on direct
7 examination --

8 THE COURT: We don't need the preface about you
9 testified on direct. Let's get this going.

10 BY MS. RHEE:

11 Q It addressed -- it's a fact, was to address the
12 inefficiencies of the waterfall, correct?

13 A No. I described three inefficiencies in particular of
14 the waterfall, and I do not believe EDA addresses all three
15 of those.

16 Q That's not the question. It addresses some of the
17 inefficiencies of the waterfall, correct? At least some of
18 them.

19 A Yes. That's a different question, just to be clear,
20 than what you asked.

21 Q Actually -- we don't need to argue. You'll have an
22 opportunity to expound all you want.

23 A I am not trying to argue. I am just trying to be
24 precise because I know this is important.

25 Q Okay. Let's go to the next point here.

Cross-Examination - R. Goel

1 At the bottom, even in this document that the
2 Court admonished all of us may contain a little bit of
3 fluff, the bottom says, "While EDA may be effective for many
4 publishers, it favors AdX."

5 That's in this PubMatic 2015 publication, correct?

6 A Correct.

7 Q So in other words, EDA may be effective for many
8 publishers, correct?

9 A Correct.

10 Q And the complaint that PubMatic had, as set forth in
11 this document, is that it favors AdX and AdX customers,
12 correct?

13 A Correct.

14 Q Okay. Now, zipping along in time, let's talk about
15 the UPR discussion that you had with the government attorney
16 on direct examination.

17 Do you remember that?

18 A I do, yes.

19 Q Okay. Now, PubMatic itself at around the time that
20 Google went to a first-price auction also went to a
21 first-price auction, correct?

22 A I believe that's correct. I don't recall exactly when
23 we went to a first-price auction.

24 Q But you agree, do you not, Mr. Goel, that PubMatic
25 before, back in some period of time around the whole

Cross-Examination - R. Goel

1 industry shift toward a first-price auction, ran a
2 second-price auction; is that right?

3 A That is right.

4 Q And then sometime close in time to when Google went to
5 a first-price auction, PubMatic announced that it was going
6 to a first-price auction, correct?

7 A That's correct.

8 Q Now, in the announcement that it was moving to a
9 first-price auction, PubMatic stated that its reason was
10 "There's inconsistency across auctions and a lack of
11 transparency into how each auction operates where that's
12 created an environment where buyers don't have visibility
13 into whether the auctions are being closed at first price or
14 second price."

15 Sounds familiar, right?

16 A It does, yes.

17 Q And PubMatic, in announcing its move to a first-price
18 auction, talked about how this lack of visibility makes it
19 difficult for buyers to simultaneously maintain access to
20 impressions and consistently increase spend.

21 Does that sound right?

22 A That does, yes.

23 Q And PubMatic represented that, after listening
24 carefully to customers, it would now run first-price
25 programmatic auctions on all multilevel inventory, yeah?

Cross-Examination - R. Goel

1 A Yes.

2 Q And PubMatic further represented that customers and
3 potential customers understood that the changes it made
4 reflect a larger effort by both publishers and buyers to
5 identify partners who they can trust, yes?

6 A Correct.

7 Q Now, again, you testified on direct examination that
8 PubMatic -- well, you're not a publisher, right?

9 A We are not, no.

10 Q Your customers or clients are publishers, right?

11 A That's right.

12 Q And to the extent that you were talking on direct
13 examination about what publishers think or what publishers
14 feel, that's because and only because you got that
15 information from publishers, right?

16 A That's right.

17 Q Now, finally, in announcing the change that PubMatic
18 made to a first-price auction, PubMatic told its
19 customers -- publishers, right? -- and potential
20 customers -- again, publishers -- we made this decision to
21 meet the demands of the evolving landscape and address
22 requests from our demand partners.

23 Is that right?

24 A That's right.

25 Q Now, in connection with the move not just by you but

Cross-Examination - R. Goel

1 many others, including Google, to a first-price auction,
2 you're aware, are you not, that Google deprecated last look?

3 Do you remember?

4 A I do remember they announced that, yes.

5 Q Okay. And so it's now been many, many, many years that
6 what you talked about on direct examination with respect to
7 last look has been in effect or in place, correct?

8 MS. WOOD: I object, Your Honor. I do have to
9 object. Many, many, many, many years, like 2019?

10 THE COURT: That can be a long four or five years.

11 MS. RHEE: Amen, Your Honor. It's been a long
12 three days.

13 THE COURT: Four.

14 MS. RHEE: And you make my point.

15 And now I've lost my train of thought.

16 BY MS. RHEE:

17 Q Okay. Marching forward in time -- I believe that is
18 what the objective is of this examination -- you went public
19 as a company in 2020; is that right?

20 A That's correct.

21 Q That's when PubMatic had its initial public offering;
22 is that right?

23 A That's right.

24 Q And since going public in 2020, PubMatic files yearly
25 10-Ks with the U.S. Securities and Exchange Commission,

Cross-Examination - R. Goel

1 correct?

2 A Correct.

3 Q And it also files quarterly 10-Qs with the United
4 States Exchange Commission, correct?

5 A Correct.

6 Q And as the CEO of PubMatic, you have signed each and
7 every one of those filings that are filed with the U.S.
8 Securities and Exchange Commission, correct?

9 A Correct.

10 Q And, as the judge helpfully noted, those signed filings
11 come with the penalty of perjury. You understand that,
12 correct?

13 A Yes.

14 Q Now, in addition, with each quarterly filing of your
15 documents with the U.S. Securities Exchange Commission, like
16 every other public company, you release those results in an
17 earnings call to accompany those SEC filings, correct?

18 A That is correct.

19 Q And, as the CEO, you participate in all of those
20 earnings calls, correct?

21 A Yes.

22 Q And, oftentimes -- maybe all the time, but we only have
23 so many overnight hours -- those earnings calls are often
24 accompanied by earnings presentations that you walk the
25 investment community and the public through, correct?

Cross-Examination - R. Goel

1 A Yes.

2 Q Okay. So now jumping ahead -- and now we're going to
3 work backwards in time perhaps -- the latest quarterly
4 filing and the earnings presentation and call that you had
5 was in August of 2024, this year, right?

6 A That's correct.

7 Q Just about a month ago, yes?

8 A That's right.

9 Q Okay. And when you did that filing, you also presented
10 an earnings presentation, a deck, correct?

11 A That's correct.

12 Q Okay. So let's turn to that deck.

13 MS. RHEE: And at this point in time, Your Honor,
14 we would seek to admit -- well, actually, we can just go to
15 the various slides and we can introduce them as
16 demonstratives.

17 THE COURT: Just as demonstratives?

18 MS. RHEE: Yes, Your Honor.

19 THE COURT: Okay.

20 MS. WOOD: Is there a tab?

21 MS. RHEE: Oh, yes. Tab 4.

22 MS. WOOD: And, Your Honor, the only thing I would
23 offer from an efficiency standpoint, which I think we would
24 all support, is, to the extent they just want to have him
25 read into the record things that are made in public

Cross-Examination - R. Goel

1 statements by PubMatic, the United States is prepared to
2 stipulate to that. I don't know that we need to have him
3 just read public statements.

4 THE COURT: Well, it may be a lot faster. Let's
5 just see how much time you plan to spend on this. All
6 right.

7 MS. RHEE: Yes, Your Honor.

8 If we could please publish that and go to the
9 slide that is page 5.

10 BY MS. RHEE:

11 Q You recognize this slide in the earnings presentation,
12 yes?

13 A I do, yes.

14 Q Okay. And now the big blue box in the middle
15 represents PubMatic's offerings, yes?

16 A Correct.

17 Q Okay. And at the bottom of its offerings, PubMatic
18 represents, right, in a investments earning call, that it
19 transacts and is capable of transacting CTV, correct?

20 A Yes.

21 Q Online video?

22 A Yes.

23 Q Okay. Mobile app?

24 A Yes.

25 Q Desktop?

Cross-Examination - R. Goel

1 A Yes.

2 Q Mobile web?

3 A Yes.

4 Q Native?

5 A Yes.

6 Q Now, similarly, if we could then go to that same
7 earnings presentation and go to Slide 8.

8 MS. RHEE: And in order to just keep this clean
9 for the record, Your Honor, this will be Goel Demonstrative
10 2.

11 THE COURT: All right.

12 BY MS. RHEE:

13 Q Okay. You recognize this slide in the earnings
14 presentation, correct?

15 A I do, yes.

16 Q Okay. And what you represent here is about the growth
17 of mobile app, yes?

18 A Yes, the growth in the mobile app market on the left,
19 yes.

20 Q And what you've said about this is that what this slide
21 shows is that mobile app continues to drive revenue growth
22 and differentiation for PubMatic; is that right?

23 A That is correct.

24 Q Okay. And what this also shows is that mobile app
25 spending was up 13 percent in just the previous year from

Cross-Examination - R. Goel

1 2023 to 2024?

2 A That's right, in terms of the market, yes.

3 Q Okay. And then in terms of your revenue, it's up
4 20 percent year over year, right, into this second quarter
5 of 2024, yes?

6 A Yeah, for Q2 year over year, over 20 percent, yes.

7 Q Okay. That's a 2X of year-over-year increase, yeah?

8 A The 2X refers to the revenue flowing through our mobile
9 app wrapper solution, which is OpenWrap SDK.

10 Q Okay. Apologies.

11 And then you also have represented in your
12 earnings presentation that mobile app revenue was up
13 20-plus percent; is that right?

14 A Our mobile app revenue, yes, in Q2 was up over
15 20 percent year over year.

16 Q Okay. And then in the end of fiscal year 2021, mobile
17 and video had already represented, I think, 67 percent of
18 PubMatic revenue. Is that right?

19 A That sounds accurate. I don't recall specifically, but
20 that sounds accurate.

21 Q Okay. And I take it it's inched up a bit?

22 A It has been growing, yes.

23 MS. WOOD: Your Honor, I would just renew my
24 cumulativeness objection and relevance.

25 THE COURT: Overruled.

Cross-Examination - R. Goel

1 BY MS. RHEE:

2 Q Okay. And marching right along here, I think that we
3 can stand down now on that earnings presentation. Okay?

4 Now, you testified on direct examination about
5 PubMatic's take rate. Do you remember that?

6 A Yes.

7 Q And you said you didn't actually know what Google's
8 take rate was, but you offered an opinion about how your
9 take rate compared, right?

10 A Correct.

11 Q Okay. So now this is a document that's marked highly
12 confidential and it's under seal, but I think I can do this
13 without actually talking about any of the numbers. But I do
14 think this is important, given the scope of the direct
15 examination.

16 THE COURT: All right. Is there an exhibit that's
17 related to that?

18 MS. RHEE: Yes, there is. This is Tab 21, DTX
19 0665. And we are not going to show it, but we're going to
20 go -- we're going to do it old-fashioned.

21 BY MS. RHEE:

22 Q And you can see it in the binder, correct?

23 A Yes.

24 MS. WOOD: Is there a page?

25 MS. RHEE: I'm going to lay a foundation; so just

Cross-Examination - R. Goel

1 indulge me.

2 BY MS. RHEE:

3 Q Okay. So you see Tab 21, right? DTX 0665, right?

4 A Yes, I do.

5 Q Okay. And this is a deck that is prepared for the
6 board meeting of January 2019, correct?

7 A Correct.

8 Q And you were on the board, correct?

9 A Yes.

10 Q And you basically have always been on the board,
11 correct?

12 A Yes.

13 Q And, God willing, you will remain on the board.

14 A Yes.

15 Q Okay. Now, we're going to direct your attention to
16 page 39 of this exhibit.

17 MS. RHEE: And, Your Honor, at this point in time,
18 we would seek to admit -- and, again, given the highly
19 confidential nature of this -- just page 39 with respect to
20 the take rate and keep it under seal or redacted.

21 THE COURT: This has the 170 as the Bates-stamp
22 number; is that right?

23 MS. RHEE: Court's indulgence.

24 THE COURT: You said page 39. Mine is completely
25 black.

Cross-Examination - R. Goel

1 MS. RHEE: I think if you go to the blue divider
2 is the redacted version. Do you see that, Your Honor?

3 THE COURT: I'm getting there.

4 BY MS. RHEE:

5 Q And, Mr. Goel, do you see that?

6 A I am attempting to navigate here. You said it's page
7 numbered 39?

8 Q Yes.

9 A Slide No. 39?

10 Q Yes.

11 THE COURT: All right. Bates stamp is 170?

12 MS. RHEE: Yes, Your Honor.

13 THE COURT: All right. I've got it.

14 BY MS. RHEE:

15 Q I can --

16 A I think I'm on the wrong page.

17 Q Hold on one second. PubMatic's counsel is seeking to
18 get a copy.

19 MS. WOOD: I think the practice has been to give
20 the third-party counsel --

21 MS. RHEE: I apologize. And, again, to assure
22 PubMatic's counsel, it is this one slide presentation. And
23 we seek to admit it under seal or highly redacted so there
24 are no figures.

25 MR. ZAUR: On behalf of PubMatic, we appreciate

Cross-Examination - R. Goel

1 that. And ask that great care be exercised with respect to
2 the testimony.

3 MS. RHEE: Clearly.

4 THE COURT: All right. Let's ask the question.

5 BY MS. RHEE:

6 Q Now, you're familiar with this chart, yes?

7 A Yes.

8 Q Okay. And what it shows is, for the fiscal year ending
9 2018 -- because that's what we had available in the
10 production set -- the take rates that PubMatic offers are
11 dependent on the nature of the customer, correct?

12 A Correct.

13 Q Okay. So, for example, what's labeled the VIP pubs --
14 and I take pubs to be publishers here, right?

15 The VIP publishers, for example, may get a better
16 take rate than the other publisher categories; is that
17 right?

18 A I'm uncomfortable speaking to that.

19 MS. WOOD: I'm going to object because without a
20 meet-and-confer with counsel --

21 MS. RHEE: I will withdraw the objection. The
22 document is now in evidence; so I will not ask the question.
23 I withdraw it.

24 THE COURT: All right. Now, hold on.

25 Exhibit-- this Exhibit 655, I'm at this point only

Cross-Examination - R. Goel

1 admitting page 72. The redacted version is completely
2 black. This -- what I'm looking at right now will go under
3 seal --

4 MS. RHEE: Correct.

5 THE COURT: -- in the record. It speaks for
6 itself. Just ask general questions. No mention of any
7 entity or any amount. That should solve the problem?

8 MS. WOOD: Page 30 --

9 MR. ZAUR: Yes. Thank you, Your Honor. May I ask
10 that counsel cease recitation of the text and the exhibit be
11 stricken?

12 THE COURT: It's already done. All right?

13 MS. RHEE: One last question.

14 BY MS. RHEE:

15 Q Does the box in the very far right-hand column
16 represent the total company take rate?

17 A On which row are you referring to? The bottom row?

18 Q Yeah, the bottom right-hand corner.

19 A Yes.

20 Q Okay. And your testimony on direct examination was,
21 even though you had no actual knowledge of Google's take
22 rate, but I believe in the record on direct examination you
23 said you believed Google's take rate to be 20 percent. Is
24 that right?

25 A That's correct.

Cross-Examination - R. Goel

1 Q Okay.

2 Now, moving right along, CTV has been a key area
3 of growth for PubMatic, right?

4 A Yes, it is.

5 Q And there's been shift to advertising on those formats,
6 correct?

7 A Correct.

8 Q And in 2023 you reported that CTV was expected to be a
9 \$65 billion market?

10 A I don't recall the number specifically.

11 Q Does that sound familiar? Roughly in the ballpark?

12 A Roughly, yes.

13 Q Give or take a billion?

14 A Maybe give or take more than that, but yes, roughly.

15 Q And you reported that PubMatic CTV revenue was up over
16 50 percent year over year in Q1 2023, right?

17 MS. WOOD: Objection, relevance. The growth or
18 lack of growth in a product outside of the product markets
19 brought here, I just don't believe there is an articulable
20 relevance, much less one that merits this amount of time.

21 MS. RHEE: Your Honor --

22 THE COURT: I think this goes, if I understand it,
23 to the concept of what is the market we're talking about.

24 MS. RHEE: Bingo, Your Honor.

25 THE COURT: And if there are viable markets -- I

Cross-Examination - R. Goel

1 understand why you're objecting, but I'm going to overrule
2 the objection. It's within the scope of the case. It is
3 one of the issues that has to be --

4 MS. WOOD: I'm not sure the growth of the market
5 is in the case. Whether it is part of the market is one of
6 their attempted defenses to market definition, but the
7 growth in the market doesn't reflect on market definition,
8 Your Honor.

9 THE COURT: No, but it goes to -- well, if a
10 market is disappearing or shrinking, I think it does. So
11 I'm overruling the objection.

12 Go ahead.

13 MS. RHEE: Thank you, Your Honor.

14 THE COURT: We don't need a lot of time on this.

15 MS. RHEE: No. We are zipping along, Your Honor.

16 THE COURT: Okay.

17 BY MS. RHEE:

18 Q Again, the question posed to you was you reported that
19 PubMatic's CTV revenue was up 50 percent year over year,
20 yes?

21 A That sounds right.

22 Q Okay. And that's the reason why PubMatic is
23 accelerating the pace of its new innovation and attention to
24 CTV, yes?

25 A That's correct.

Cross-Examination - R. Goel

1 Q And you reported that you're succeeding because
2 PubMatic saw a percentage increase in its CTV publisher
3 customer base, correct?

4 A Correct.

5 Q And you attributed customer growth to the recognition,
6 right, within the industry to the advantages of programmatic
7 CTV?

8 A Yes.

9 Q All right. Now, again, because you file with the
10 Securities and Exchange Commission on both a quarterly basis
11 as well as an annual basis, one of the standard discussions
12 in those filings is your competition, right?

13 A Yes.

14 Q Okay. And you talk about how your competition is
15 competitive and complex due to a variety of factors, right?

16 A Yes.

17 Q And, in fact, what you say is right under the section,
18 you know, called "Our Competition."

19 "The digital advertising ecosystem is competitive
20 and complex due to a variety of factors," correct?

21 A Correct.

22 Q Okay. And you've made that representation since you've
23 gone public in 2020. And you say the same thing about the
24 state of competition in the industry every successive
25 quarter and year, yeah?

Cross-Examination - R. Goel

1 A I think that's right, yes.

2 Q And then you further state that you, PubMatic -- or the
3 way that the filing reads, it's the we, right? -- "face
4 intense competition in the marketplace and are confronted by
5 rapidly changing technology, evolving industry standards,
6 and consumer preferences."

7 Sound familiar?

8 A It does.

9 Q Okay. And, again, since you've gone public, those are
10 the representations that you make quarter over quarter, year
11 over year about the state of competition, yes?

12 A Yes.

13 Q Now, you also make representations about market share
14 growth, right, in order to tell your investors or potential
15 investors about why they should invest with you, yes?

16 A That's correct.

17 Q But again, in filings, you need to be accurate and
18 honest about what those representations are, right?

19 A Yes.

20 Q Okay. And you have talked about how, if you look at
21 PubMatic's growth relative to the market, you've been
22 growing roughly at twice the rate of growth in the market,
23 yeah?

24 A That's right.

25 Q Okay. So, in other words, PubMatic has increased its

Cross-Examination - R. Goel

1 share of the pie, yes?

2 A Yes.

3 Q That's what market share growth is, yeah?

4 A Yes.

5 Q Similarly, you talk about scale, yes?

6 A Yes.

7 Q Okay. And you -- again, this is in the context of
8 earning statements and representations where you're going to
9 get in a lot of trouble with a whole lot of different set of
10 regulators if you're not honest and accurate, yeah?

11 A I'm aware, yes.

12 Q Okay. And you tell investors, potential investors, and
13 analysts about how PubMatic is global-scaled and profitable,
14 yeah?

15 A Yes.

16 Q Okay. And you similarly say that you have global omni
17 channel scale, right?

18 A Yes.

19 Q Okay. And by omni channel here, that goes back to that
20 earnings presentation visual where omni channel means across
21 all of those different ad formats that we already walked
22 through, yeah?

23 A That's correct.

24 Q Okay. And, in fact, even -- and I guess we have a
25 disagreement about how long is a long time ago. But even

Cross-Examination - R. Goel

1 when you went public in 2020 in your S-1 filing, right --
2 again, with the Securities Exchange Commission -- there's a
3 very, very lengthy filing submission that you have to put in
4 if you want to have an initial public offering, correct?

5 A Correct.

6 Q And you remember that was a lot of work to put that
7 together, yeah?

8 A Yes.

9 Q Okay. And in that filing, you talked about how you
10 were able to harness your massive data asset. Do you
11 remember that?

12 A Yes.

13 Q And your sophisticated machine-learning algorithms,
14 correct?

15 A Yes.

16 Q In order to increase publisher revenue, yeah?

17 A Yes.

18 Q And advertiser return on investment?

19 A Yes.

20 Q Okay.

21 MS. RHEE: Again, moving right along, Your Honor.

22 BY MS. RHEE:

23 Q We're going to now talk about header bidding. You
24 remember being asked questions about header bidding on the
25 direct examination?

Cross-Examination - R. Goel

1 A I do.

2 Q Okay. Now, you will agree -- and I believe you already
3 testified -- header bidding came into prominence starting
4 around 2016?

5 A Yeah, 2015, 2016, roughly.

6 Q Okay. And, again, in your initial public offering
7 where you took a lot of care to make accurate statements,
8 remember, you talked about header bidding, yes?

9 A I don't recall specifically, but probably we did, yes.

10 Q Would it surprise you that, in your public filing --
11 because, again, I just want to move this along -- you
12 represented that header bidding, which came to prominence
13 starting in 2016, further increased the complexity of
14 programmatic advertising? Yes?

15 A Sounds right, yes.

16 Q And you talked about in your IPO and the S1 that header
17 bidding has fundamentally transformed programmatic
18 advertising, yes?

19 A Yes.

20 Q And you wrote in your IPO public filing, "As a result,
21 there is greater demand for each ad impression and increased
22 publisher revenue."

23 Does that sound familiar?

24 A That does, yes.

25 Q And you agree, right?

Cross-Examination - R. Goel

1 A Yes.

2 Q And "header bidding has now been adopted" -- and again,
3 remember this is November 2020. But in your IPO, you
4 stated, "Header bidding has now been adopted by over
5 60 percent of digital publishers in the United States."
6 Yes?

7 A Yes.

8 Q And you represented in your IPO, again back in 2020,
9 "PubMatic is a leading provider of technology solutions that
10 enable and improve header bidding for its customers." Yes?

11 A Correct.

12 Q And, in fact, header bidding had developed its own
13 header bidding solution marketed as Open Wrap in 2016,
14 correct?

15 A Yes.

16 Q And Open Wrap, which is your market offering or your
17 header bidding solution, it's built on Prebid; is that
18 right?

19 A It is, yes.

20 Q Okay. In fact, PubMatic is on the board of Prebid; is
21 that right?

22 A We are, yes.

23 Q Now, both of -- well, let's make this not compound.
24 Let me start with: Google also built a header wrapping
25 solution that is on the market, correct?

Cross-Examination - R. Goel

1 A I believe so, yes.

2 Q And you testified about it on direct examination. It's
3 exchange bidding or open bidding, correct?

4 A Correct.

5 Q So not an "I believe so." You know this, correct?

6 A Well, there's some dispute in the industry if it's, in
7 fact, header bidding.

8 Q It is a header bidding offering, correct?

9 A Like I said, there's some dispute in the industry as
10 whether or not it is header bidding.

11 Q Now, Google's open bidding or exchange bidding offering
12 is not built on the open source Prebid API; is that right?

13 A That's right.

14 Q Instead, what Google built was its own proprietary
15 header bidder offering, correct?

16 A Correct.

17 Q Now, Google is not the only one. Let's take Amazon,
18 for example.

19 You're aware that Amazon also has a header bidding
20 offering in the market, correct?

21 A Yes, that's right.

22 Q And that's TAM, right?

23 A Yep, transparent ad marketplace.

24 Q Thank you for that.

25 Now, similarly, Amazon built its header bidding

Cross-Examination - R. Goel

1 offering on its own proprietary code and not the open source
2 Prebid API; is that right?

3 A That's right.

4 Q And you-all compete for the same publisher customer
5 base with respect to the various header bidding offerings,
6 yeah?

7 A That is correct.

8 Q And even though you all compete, you have publicly
9 represented that you are able to integrate or that
10 PubMatic's other offering, the cloud infrastructure
11 offering, is able to integrate with Google's open bidding,
12 yeah?

13 A That's correct.

14 Q Now, similarly, in earnings calls and presentations,
15 you've represented that PubMatic has seen a surge in the
16 adoption of its wrapper solution -- that's another word for
17 header bidding offering, right?

18 A Yes.

19 Q -- as publishers increasingly abandon their home-grown
20 Prebid wrappers or alternative solutions for PubMatic's Open
21 Wrap, correct?

22 A That's correct.

23 Q Okay. And you've given examples of basically getting
24 customers to switch, yeah?

25 A Yes.

Cross-Examination - R. Goel

1 Q Now, moving on to yet another innovation or evolution
2 in this industry, you have, again, represented in various
3 earnings calls and statements that supply path optimization
4 is an important trend in the industry, yes?

5 A Yes.

6 Q Okay. And you have characterized supply path
7 optimization as when publishers and advertisers seek to find
8 the most efficient supply path to facilitate matches, yes?

9 A Yes.

10 Q And one way that that is accomplished is by
11 disintermediating the other ad tech tools or players that
12 are in the middle between the buyer and the publisher; is
13 that right?

14 A Yes.

15 Q And starting in 2019 or so, PubMatic has entered into
16 agreement directly with some of the largest agencies and
17 advertisers in the world to offer your supply path
18 optimization offering, yes?

19 A That is correct.

20 Q And SPO, or supply path optimization, has become a
21 growth area of PubMatic's business; is that right?

22 A That's right.

23 Q And it continues to grow as a share of PubMatic's
24 overall business; is that right?

25 A That's right.

Cross-Examination - R. Goel

1 Q And, in fact, just in the last Q1 2023 to Q1 2024, SPO
2 as a percentage of PubMatic's activity on platform went from
3 35 percent to 50 percent.

4 Does that sound right to you?

5 A That does sound right.

6 Q Now, in May of 2023, PubMatic announced Activate.

7 You're familiar with Activate, right?

8 A I am, yes.

9 Q That's the market name for an SPO solution that
10 leveraged an acquisition that you made in order to gain
11 market share in the SPO space, correct?

12 A Correct.

13 Q And the way that you've characterized Activate, again,
14 in earnings presentations and calls is that it's an
15 end-to-end SPO solution that enables buyers to execute
16 nonbidded direct deals -- direct deals -- on PubMatic's
17 platform accessing CTV, premium video, at scale, and
18 unlocking unique demand for PubMatic's publishers. Yeah?

19 A That's correct.

20 MS. RHEE: And one more earnings presentation,
21 Your Honor. And, here, we would seek to introduce as a
22 demonstrative -- and this will be Goel Demonstrative 3 --
23 what you can find on Tab 18.

24 BY MS. RHEE:

25 Q And now, Mr. Goel, this is the Q1 2023 earnings

Cross-Examination - R. Goel

1 presentation, and this was shortly after you basically
2 integrated the acquisition, yes?

3 A Yes.

4 Q Okay. Now, I want to direct your attention to 472.
5 Okay. Because I think we all find the visuals helpful.

6 You're familiar with this, correct?

7 A I am, yes.

8 Q It's a visual depiction of what supply path
9 optimization does, right?

10 A Correct.

11 Q And in particular, what you told the investing
12 community and your would-be investors about how Activate
13 works, yeah?

14 A Yes.

15 Q And here you can see -- it's a great graphic -- what
16 Activate does and what supply path optimization does is it
17 creates, as you put it on this slide, a single technology
18 layer between the buyer and the publisher. Is that right?

19 A That's correct.

20 Q And it disintermediates all the stuff in between.

21 A Specifically for programmatic direct transactions, not
22 all programmatic transactions.

23 Q All right. Now --

24 THE COURT: Now, this is your Demonstrative
25 Number --

Cross-Examination - R. Goel

1 MS. RHEE: 3, Your Honor.

2 THE COURT: Right.

3 MS. RHEE: The first one was --

4 THE COURT: No, I know.

5 MS. RHEE: Great.

6 BY MS. RHEE:

7 Q And you've represented again to the investing community
8 that this kind of SPO offering creates a growing moat and
9 flywheel to attract new customers, new publishers, who want
10 to access the unique demand available only on PubMatic,"
11 correct?

12 A Correct.

13 Q And you have represented that you anticipate over the
14 next several years there's potential for SPO activity to be
15 75 percent of PubMatic's total buyer activity. Yes?

16 A That's correct.

17 Q Okay. Now, similarly, again, not in fluff, but in
18 earnings calls and in statements to the investing public in
19 conjunction with your Qs and Ks, you've talked about unique
20 demand, correct?

21 A Yes.

22 Q And you've made multiple statements and representations
23 about PubMatic's access to unique demand, correct?

24 A Yes.

25 Q Now, just quickly moving in time, you remember being

Cross-Examination - R. Goel

1 asked and shown this document, PTX 1621, about PubMatic's
2 internal assessment or experiments with respect to UPR
3 impact.

4 Do you remember that?

5 A I do, yes.

6 Q Okay. And at the bottom, when you look at B, "Custom
7 wrappers on other GAM publishers," those are Google's own
8 customers, yeah?

9 A Those are what? Sorry.

10 Q Those are Google's own customers, correct?

11 A Because they are using GAM, Google Ad Manager, yes,
12 their ad server customer.

13 Q They're an ad server customer; is that right?

14 A Of Google, yes.

15 Q And you can see, at least in your own internal
16 assessment, a decline there that's comparable to the decline
17 that you were noting in exchange bidding; is that right?

18 A That's right.

19 Q And then in contrast, in D, when you say "Other
20 wrappers seem to be in affected," TAM there would be the
21 Amazon wrapper offering, correct?

22 A That's right.

23 Q Okay. And then you note some others, correct?

24 A Correct.

25 Q Those would be Google's competitors, right?

Cross-Examination - R. Goel

1 A Yes.

2 Q Okay. And even in your own internal experimentation
3 and assessment, Google's competitors seem to be unaffected
4 by this UPR change; is that right?

5 A That's correct.

6 Q Okay. Now, I think --

7 A Just to be clear, though, that's where they're not
8 using Google's ad server, not necessarily Google's open
9 bidding --

10 Q But they are not affected by UPR; is that right?

11 A But they're not using the ad server, yes.

12 Q Correct?

13 A Yes.

14 Q But -- but --

15 A Because they are not using --

16 Q -- there's another exchange, correct?

17 A UPR wouldn't be relevant for them if they are not using
18 Google's ad server.

19 Q Now, when you finally -- last set of questions,

20 Mr. Goel, because I'm mindful of the time.

21 From the time that you had this demonstration,
22 this booth at the tech fair in 20 -- or, I'm sorry -- in
23 2007 to 2024, today, that's approximately 17 years or so, if
24 I've done the math right. Is that right?

25 A That's right.

Cross-Examination - R. Goel

1 Q Okay. And even in the span of both your direct
2 examination and the cross today, you've testified to a lot
3 of changes in this display advertising or digital
4 advertising ecosystem, right?

5 A Yes.

6 Q Okay. Now, even before we get to 2007, you testified
7 on direct examination about search, right? But, now,
8 search, that existed well before this 2007 period, right?

9 A Yeah. Although I don't recall talking about search
10 under direct examination.

11 Q Now, because by 2007, I mean, the internet had been
12 around for the greater part of a decade plus, yeah?

13 A Yes.

14 Q So that's in the kind of pre-era. But starting in
15 2007, since you started PubMatic, you saw the creation, the
16 rise, and the adoption of RTB as an industry standard
17 protocol, yes?

18 A Yes.

19 Q Okay. You saw the demise of the waterfall as a very
20 inefficient means of selling digital ad space, at least
21 remnant or -- digital ad space, yes?

22 A Yes.

23 Q Okay. And you testified about -- well, you didn't
24 testify to it, but the documents are replete with references
25 to the creation, the adoption, and growth of social media,

Cross-Examination - R. Goel

1 yes?

2 A Yes.

3 Q Also, the creation of mobile phones, correct?

4 A Yes.

5 Q Because in 2007, they were maybe brand-new?

6 A They didn't exist.

7 Q They didn't exist. Thank you very much.

8 Okay. And similarly, the explosion of mobile
9 apps, yes?

10 A Yes.

11 Q Okay. You talked about, as you put it, the
12 transformation of header bidding, correct?

13 A Yes.

14 Q Both the creation, the adoption, the explosion, and the
15 transformation of header bidding, yes?

16 A Yes.

17 Q The consolidation of a whole bunch of one-off
18 individual publisher header bidding solutions to
19 consolidation in the header bidding space where lots of
20 players, like you, have consolidated with competing
21 offerings, yes?

22 A Yes.

23 Q And you've talked about or we've covered the creation
24 of streaming video, yes?

25 A Yes.

Cross-Examination - R. Goel

1 Q Connected television, yes?

2 A Yes.

3 Q And we just ended with supply path optimization, yes?

4 A Yes.

5 Q Okay. So now that's in the last 17 years, yes?

6 A Yes.

7 Q And now certainly, Mr. Goel, are you able to predict
8 what's next in this digital ecosystem, what's going to
9 happen in the next five years?

10 A Not accurately.

11 Q Even wildly speculatively?

12 A I mean, I'm sure we all have predictions. But, like I
13 said, they may not be accurate.

14 Q In 2007 did we ever believe that, like, we'd be able to
15 walk around watching TV?

16 THE COURT: All right, Counsel. That's enough.

17 BY MS. RHEE:

18 Q Can you predict what's happening in ten years?

19 A I thought you were asking about the next five years.

20 Q Well, now I'm asking about the next ten years.

21 A I can make predictions, sure.

22 Q That's all they would be, right?

23 A Yes.

24 Q And certainly, you can't predict what's going to happen
25 17 years from now, right?

Cross-Examination - R. Goel

1 A Correct.

2 MS. WOOD: Objection, relevance. Cumulative.

3 THE COURT: Well, it's not necessary. It's
4 cumulative. It's not that relevant. Let's move on.

5 BY MS. RHEE:

6 Q Because in digital advertising, as in all tech, a
7 single year is like dog years in terms of technological
8 advancement and innovation, yes?

9 A I don't have a dog year metric for the pace of
10 innovation.

11 MS. RHEE: And with that, I pass the witness, Your
12 Honor.

13 THE COURT: Ms. Wood.

14 MS. WOOD: Thank you, Your Honor. First, let me
15 return -- and again, mindful of the redactions, I am going
16 to return to DTX 665. And I think to the extent the Court
17 is going to --

18 THE COURT: All right. What's the tab number?

19 MS. WOOD: It is Tab 24 of the cross-examination
20 binder.

21 I think I got that wrong.

22 THE COURT: Yeah, you have it wrong.

23 MS. WOOD: Sorry.

24 Do you know what tab it is?

25 MS. RHEE: 21.

Redirect Examination - R. Goel

1 MS. WOOD: 21. All right. Thank you.

2 THE COURT: All right. 21.

3 MS. RHEE: Is it the thing under seal?

4 MS. WOOD: The DTX 656.

5 THE COURT: Okay. Yes. It's DTX 665.

6 MS. WOOD: Does the witness have that in front of
7 him?

8 THE WITNESS: I do have that tab. Which page?

9 REDIRECT EXAMINATION

10 BY MS. WOOD:

11 Q So let's first go to the page you were shown, which I
12 believe was page 39 of 72.

13 A Okay. Yes, I have it.

14 Q And the only question I have is whether the number that
15 you previously referenced on cross-examination relates to
16 open auction open web display only.

17 A It does not.

18 Q Okay. And then I'd like you to look at page 40, the
19 next page.

20 A Yes.

21 Q Do any of those numbers relate to open auction open web
22 display only?

23 A No.

24 MS. WOOD: Okay. That's all.

25 Oh, I would ask 40 be kept under seal to the

Redirect Examination - R. Goel

1 extent 39 is going to be kept under seal. But I don't
2 really see the relevance of 39 in light of that testimony.

3 THE COURT: All right. Well, we've talked about
4 it. It's part of the record. All right. But 39 and 40,
5 the redacted versions are the ones that will be on public
6 view.

7 MS. WOOD: I don't think there's any redactions.
8 They would just be filed under seal with the Court, pages 39
9 and 40 of DTX 665.

10 THE COURT: They're pure black. I mean, for
11 purpose of having access --

12 MS. WOOD: Oh, I see.

13 THE COURT: So 39 and 40 need to be uploaded,
14 redacted. And then the two that are under seal will be part
15 of the permanent record for the court under seal. All
16 right?

17 BY MS. WOOD:

18 Q All right. I'd like to return to Goel Demonstrative 1,
19 Tab 4A, page 5.

20 Do you see that?

21 A I do, yes.

22 MS. WOOD: Can we have it up on the screen,
23 please.

24 Thank you.

25 BY MS. WOOD:

Redirect Examination - R. Goel

1 Q Do you remember Ms. Rhee showed you the formats and
2 devices at the bottom?

3 A I do, yes.

4 Q Do all publishers sell CTV ad inventory?

5 A No, they do not.

6 Q Do all publishers sell online video ad inventory?

7 A No, they do not.

8 Q Do all publishers have mobile apps?

9 A No.

10 Q Do all publishers sell native ads?

11 A No.

12 MS. WOOD: And could I get Demonstrative 3,
13 please. It looks like this, Tab 18. Thank you. It's
14 page 8, I believe.

15 BY MS. WOOD:

16 Q And you were talking here about a new product for
17 supply path optimization. I just wanted to make sure I
18 heard you correctly. Is this a product for programmatic
19 open web display?

20 A No.

21 Q This is a product for direct only?

22 A For direct and focused on CTV and online video.

23 Q CTV and online video and direct only?

24 A Correct.

25 Q Okay. Now, you talked -- you were shown some documents

Redirect Examination - R. Goel

1 about how various aspects of the market were growing, and I
2 think that you were shown PubMatic, in fact, had a two-times
3 rate of growth in market share.

4 Do you recall that?

5 A I do, yes.

6 Q Do you believe that you are facing fair competition in
7 the market for ad tech tools and open web display?

8 A No.

9 Q And do you believe that ad tech tools, specifically the
10 ad exchange, is a relevant product market for open web
11 display?

12 MS. RHEE: Your Honor, one, leading; and two, that
13 assumes the relevant market, which is at issue here.

14 THE COURT: Well, ultimately, the Court is going
15 to determine what the relevant market is. But we've been
16 allowing some testimony from people in the industry to give
17 us their views, not on the ultimate issue.

18 MS. WOOD: Correct, Your Honor.

19 BY MS. WOOD:

20 Q In a lay sense, do you believe that is a relevant
21 market in which there is competition and people compete
22 against each other? Do you believe ad exchanges for open
23 web display compete against each other?

24 MS. RHEE: Your Honor, leading.

25 BY MS. WOOD:

Redirect Examination - R. Goel

1 Q How would you characterize -- you were shown on
2 cross-examination various statements about how digital
3 advertising is competitive and complex.

4 Do you recall that?

5 A Yes.

6 Q Can you please explain what those statements mean.

7 A Sure. There are multiple ad exchanges or sell-side
8 platforms that compete in the software market for being the
9 platform of choice for publishers and buyers.

10 Q Okay. And do you believe -- do you believe that you,
11 as in PubMatic, as an ad exchange compete against DSPs, for
12 example?

13 A No.

14 Q Do you believe that you compete against ad networks?

15 A No.

16 Q Do you believe that you compete against publisher ad
17 servers?

18 A No.

19 MS. WOOD: No further questions.

20 THE COURT: All right. Any recross?

21 MS. RHEE: Mercifully, no, Your Honor.

22 THE COURT: All right.

23 Does anybody anticipate calling this witness
24 again?

25 MS. WOOD: No, Your Honor.

Redirect Examination - R. Goel

1 THE COURT: How about the defense?

2 MS. RHEE: No, Your Honor.

3 THE COURT: All right. Mr. Goel, you can stay in
4 court and watch the proceeding or you may leave, but you're
5 not to discuss your testimony with any witness who has not
6 yet testified. Thank you.

7 THE WITNESS: Thank you.

8 THE COURT: All right. We can start with the next
9 witness.

10 MS. WOOD: I think that would be -- yeah, let's
11 get at least a little underway, Your Honor.

12 Your Honor, I'm reminded of one thing. We had
13 agreed that Mr. LaSala, the former employee -- somehow the
14 Google former employees pulled the good card because all the
15 other three Ps are not at certain times.

16 I'm wondering if it's worthwhile to get 15 minutes
17 of testimony, given that tomorrow morning he will then have
18 to wait for Mr. LaSala. Or could we ask for LaSala to wait
19 for Mr. Kershaw, who's in from California?

20 THE COURT: How long did you anticipate
21 Mr. Kershaw's direct to take?

22 MS. WOOD: Much shorter than Mr. LaSala's, I'll
23 tell you that.

24 THE COURT: All right. We'll start with
25 Kershaw. Mr, and then LaSala will testify after we finish

Direct Examination - T. Kershaw

1 with Kershaw tomorrow morning. All right?

2 DIRECT EXAMINATION

3 MS. WOOD: Thank you very much, Your Honor.

4 Thereupon,

5 TOM KERSHAW,

6 Having been called as a witness on behalf of the plaintiffs

7 and having been first duly sworn by the Deputy Clerk, was

8 examined and testified as follows:

9 (Time noted: 5:43 p.m.)

10 THE COURT: Mr. Kershaw, you're very tall, which
11 is great, but it may be a problem. That's the microphone in
12 front of you, that black box. You're going to have to lean
13 over.

14 THE WITNESS: Should I lean now?

15 THE COURT: I don't want you to hurt your back.
16 Or speak up in a good loud voice so we can hear you. It's
17 the end of the day.

18 All right. Do we have the books?

19 MS. GARCIA: We don't have any, Your Honor.

20 THE COURT: Excellent. All right. Let's go.

21 MS. GARCIA: And this is Kelly Garcia for the
22 United States.

23 DIRECT EXAMINATION

24 BY MS. GARCIA:

25 Q Good evening, Mr. Kershaw. Please introduce yourself

Direct Examination - T. Kershaw

1 to the court.

2 A My name is Tom Kershaw.

3 Q And where do you work?

4 A Currently, I'm in the music industry. Prior to that, I
5 worked at a travel company. And before that, I was in the
6 advertising industry for about six years, partly with
7 Rubicon Project and partly with Google.

8 THE COURT: All right. You are too soft. So
9 you're either going to have to lean in close to that
10 microphone or just speak up.

11 THE WITNESS: Okay. Should I repeat that?

12 THE COURT: Just talk like that, and you'll be
13 fine.

14 BY MS. GARCIA:

15 Q Would you please repeat that. That would be --

16 THE COURT: I heard it.

17 BY MS. GARCIA:

18 Q Thank you, Mr. Kershaw. So what is your current title?

19 A I'm chief technology officer. I have been chief
20 technology officer at various companies for over a decade.
21 So I'm an engineer, a software engineer.

22 Q And prior to your current role, where did you work?

23 A Prior to currently, I worked at a company called
24 Travelport. It was a travel software company that let you
25 find air tickets and hotel rooms and various travelly stuff.

Direct Examination - T. Kershaw

1 Q And what about before that?

2 A Before that, I was at Rubicon Project, which was also
3 called Magnite at one point in its career. It was an
4 independent advertising exchange that brought buyers and
5 sellers of online advertising together.

6 Q You called that an independent exchange. Why is it an
7 independent exchange?

8 A Because it's not affiliated with one of the, like,
9 walled gardens or large players in the industry such as
10 Google. We called it independent to stress the fact that we
11 were -- we didn't have any conflicts of interest. We were
12 related simply to buying and selling for publishers and
13 buyers.

14 Q Approximately when were you at Rubicon?

15 A I want to say I started in early -- sorry. In Rubicon?
16 That would be October of 2016.

17 Q Okay. And when did you leave Rubicon?

18 A About four years later, five years later. It would
19 have been 2021-ish.

20 Q During that period of time, what ad tech tools did
21 Rubicon offer?

22 A We offered an exchange that allowed publishers to route
23 inventory to us. We then -- and when that inventory came to
24 us, we'd call a bunch of buyers, run an auction. We had 250
25 milliseconds to do it; so you had to do it quite quickly,

Direct Examination - T. Kershaw

1 and we did it billions of times an hour.

2 So we ran a set of technology that, every time
3 someone opens a webpage or opens an app or does anything on
4 the internet, that starts an auction. So that publisher or
5 webpage called via some other technology to us. We would
6 see that impression. We would call as many buyers as we
7 can, get all the bids, pick the winner, and send that back
8 to the ad server, which would you then place that on the
9 page if we won.

10 So it was a set of technology that found a bunch
11 of buyers and ran auctions in real time. And, again, that
12 thing that was important about it was that you only had 250
13 milliseconds to do it. So it was very, very -- latency was
14 a -- delay was a very important part of what we were doing.
15 So a lot of the technology we did, we were developing, was
16 to be as fast as possible.

17 Q And you called that tool an ad exchange; is that right?

18 A I call it an ad exchange, yeah.

19 Q Did Rubicon offer any other ad tech tools during your
20 time there from 2016 to 2021?

21 A Not of any significance from a revenue perspective. We
22 were -- I think we were in the ad server business for about
23 five minutes before that failed. And I think we also
24 attempted some managed prebid type of services. But these
25 were less than 1 percent of revenue. It was relatively

Direct Examination - T. Kershaw

1 small. All the money and all the transaction volume came
2 from the core exchange.

3 Q And if you could just please slow down a little bit for
4 the sake of the record, that would be fantastic. Thank you,
5 sir.

6 So did Rubicon at that time offer an advertiser ad
7 network?

8 A An advertising ad network? No, we were an open
9 exchange, not what we would consider -- an advertising ad
10 network is considered a closed group which is not open to
11 general bidding. Rubicon was focused on the open exchange,
12 what we call the open market for advertising.

13 Q Did Rubicon -- did Rubicon offer a DSP?

14 A We had a DSP that we were building when I arrived. I
15 ended up killing that project because there was no chance of
16 it being successful.

17 Q Why not?

18 A It's a very difficult market. And, you know, we had
19 limited resources. We wanted to focus on the exchange part
20 of the business. And so we were -- we didn't want to put
21 all our eggs all over the place. It takes a substantial
22 investment to build a business, especially on the buy side
23 when you're anchored on the sell side, as Rubicon was. So I
24 had made the decision -- it was my decision -- to kill that
25 business.

Direct Examination - T. Kershaw

1 Q And so could you explain to the Court what were some of
2 your responsibilities when you were chief technology officer
3 at Rubicon?

4 A Well, I ran the software development process. So all
5 of the software that we developed was on my team. I was
6 also in charge of product management, the products we built,
7 operations, security. And I fixed laptops, you know, and
8 did all of that stuff too, made sure the email servers were
9 critical. Fun stuff.

10 Q Could you describe a day -- an example of a day in the
11 life of a CTO at Rubicon?

12 THE COURT: Let's move this along. This is not
13 helping.

14 MS. GARCIA: Sure. Sure.

15 BY MS. GARCIA:

16 Q Did you sit on any boards while you were at Rubicon?

17 A Yes. I was on the board and was a cofounder of
18 Prebid.org, which was an open-source technology to bring
19 header bidding to the industry in a standardized way and to
20 create an open, transparent environment for software.
21 Because prior to that time, most software in the industry
22 was opaque. You couldn't tell how it worked. It was all
23 hidden in what we would call black boxes.

24 And the purpose of Prebid was to create an open
25 environment where nothing was hidden, everything was

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1 transparent, and everything was visible by all participants.

2 Q Let me just take a step back there. You mentioned
3 Prebid.org. What is Prebid?

4 A Prebid -- well, it's -- well, Prebid, the technology,
5 is a set of software that publishers can use to run their
6 own -- take control over the auction process that previously
7 had been determined by what was called the ad server. So it
8 was a set of technologies for publishers to run large-scale
9 ad systems in their -- on their pages.

10 Q And what about Prebid, the organization?

11 A The organization was a group of industry
12 representatives that came together, and we collectively
13 owned the assets. So the software, the JavaScript that ran
14 on pages, the servers that supported that was collectively
15 and community owned.

16 And whenever we made a decision, it was done
17 publicly. The arguments were published. All of the
18 software was published in open servers so anyone can see it.
19 So it was an organization that started with some exchanges
20 and publishers -- about, you know, 20 or 30 of them -- but
21 eventually ballooned into thousands of participants. And
22 it's viewed as a community asset for running large-scale
23 advertising networks. I said "networks," but "systems" is
24 probably a better word.

25 Q Briefly, could you please describe how you founded

Direct Examination - T. Kershaw

1 Prebid?

2 A How I founded Prebid -- well, at the time header
3 bidding was just starting, and it was not taking off because
4 of the complexities of publishers to run that environment
5 because everyone had a different solution for header
6 bidding. There was ten different solutions, and they all
7 worked differently.

8 And so we -- at Rubicon, I decided it didn't
9 matter what software we ran as long as we had the publishers
10 running header bidding so we could all get access to that
11 inventory and compete for it, because we didn't see most of
12 the inventory that was out there. We saw a small sliver of
13 the inventory.

14 So what -- in order to start Prebid, I went to
15 another company in the industry, a company called AppNexus.
16 And they had a Prebid wrapper, and we decided can we -- are
17 we willing to work together and use one common wrapper if we
18 have an organization that governs it? So it's not owned by
19 any one company, that is not controlled by any one company,
20 and there's no secrets or lies or, you know, obtuse business
21 practices.

22 So I went to AppNexus and suggested we do that.
23 They laughed at me and told me to leave. Three days later,
24 they called and said maybe it's not such a bad idea, and we
25 formed Prebid as a result. And soon after, dozens of

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1 publishers joined that group.

2 Q Approximately what year was that?

3 A It would have been 2017-ish, like, mid to late 2017.

4 Q And you mentioned AppNexus. Is that known as Xandr
5 today?

6 A I don't know what they're known as today. I think
7 they're part of Microsoft today or something like that. But
8 it was AppNexus, and then yeah, it was Xandr for a while.
9 Then they were in AT&T. I don't know. I can't keep track.

10 Q So the Court has heard a lot about header bidding, and
11 I want to streamline this a little bit. You mentioned a
12 header bidding wrapper. Could you describe from your
13 vantage point as a technology-focused individual at Rubicon,
14 what is a header bidding wrapper?

15 A It is a set of code that runs on the web page. So if
16 you're on CNN, it runs code on that webpage to conduct
17 auctions. That was a substantial difference from how things
18 had heretofore worked.

19 The way it used to work is there's a webpage. And
20 when it has an ad slot, it calls an ad server. There's one
21 ad server, really, in the market. That ad server then calls
22 the demand sources. So when we were called, we would always
23 be called via the ad server, and the rules would be on the
24 ad server.

25 The header bidding set is let's not rely entirely

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1 on the ad server. Let's run script on the page itself so
2 the publisher can be in control of who's bidding on our
3 inventory, not the ad servers. That was the innovation that
4 header bidding brought was the ability to give the
5 publishers control over who bid, when they bid, what floors
6 were bid, instead of having that controlled by and
7 configured inside of the ad server.

8 Q Okay. When you're referring to the ad server there,
9 just to be clear, that's a publisher ad server?

10 A The publisher would contract with an ad server company
11 and decide which ad server to use. That was usually done
12 prior to programmatic. That was done based on their direct
13 ad sales when they would sell direct -- you know, *The New*
14 *York Times* would sell a banner at the top to Proctor &
15 Gamble.

16 The ad server existed as a piece of technology
17 long before Prebid even existed. So it's a piece of
18 infrastructure that the publisher connects to their system,
19 but it's typically controlled by and lives in the ad server
20 provider's network.

21 Q And can you give me an example of a publisher ad
22 server?

23 A There's only one that I'm intimately familiar with, and
24 that's Google's DFP, as we called it. They changed its name
25 later. But Google DFP was the ad server in 95 percent of

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1 the customers we dealt with in North America and in Europe
2 as well.

3 Q I'm sorry. I didn't catch the end.

4 A In Europe as well. I said North America, then I
5 realized, you know, it's pretty much everywhere. DFP was
6 the dominant ad server in the market.

7 Q And when did Rubicon begin participating in header
8 bidding?

9 A Well, because we didn't have access to inventory. Like
10 I said, the way it worked in the early days is we saw maybe
11 10 percent of the web pages out there would come to us. We
12 had a good chance of winning when we saw it, but 90 percent
13 of the time we never saw the inventory. That was controlled
14 by the ad server.

15 So what we wanted to do was let the publishers
16 decide who to call instead of the ad server deciding who to
17 call. So that's why we created header bidding was for a way
18 for us to get access to that inventory and bid on it because
19 you can't win if you don't bid.

20 So that -- that was the purpose of what header
21 bidding was. Publishers were -- you know, publishers wanted
22 to call us. They didn't have the ability to do it with the
23 old environment. So by putting header bidding into place,
24 it allowed us to see that inventory and compete for that
25 publisher's -- for their business.

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1 And the thinking is -- the way auctions work, the
2 more people bid, the higher the prices go. And when you're
3 the only bidder, you tend to bid pretty low. But when
4 you're competing with other bidders, bids go up. It's kind
5 of a -- we call it the tide that rises all boats. It
6 improves the overall liquidity in the market by having more
7 bidders.

8 Q And you mentioned publishers. For the record,
9 publishers were customers of Rubicon?

10 A Correct. The publisher was -- it could be -- anyone
11 who operates a website or a mobile app on the internet was
12 what we would consider to be a publisher.

13 Q And what were some of the benefits of header bidding
14 for Rubicon specifically?

15 A Well, it allowed us to see inventory and bid on
16 inventory we would not have otherwise seen. It allows --
17 and the more inventory you see, the better you get. Because
18 there's, like, this thing called scale, right?

19 So when you're bidding in a blind auction a
20 billion times an hour, what price you bid is quite difficult
21 to calculate. And, ironically, the best way to get good at
22 bidding is to lose a lot. So if you lose a lot of auctions,
23 you can understand what prices are too low and you can start
24 to raise your bids and find the optimal level.

25 If you only see that piece of inventory once a

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1 day, you're guessing. But if you saw it ten times in the
2 last five minutes, your ability to bid accurately goes up
3 dramatically.

4 So that's what header bidding helped us to do was
5 to get some scale and to see inventory we just didn't see
6 before so that we could start to optimize and get to a
7 better -- a more competitive bid.

8 Q You just used the term "bid accurately." Can you
9 explain what you mean by that.

10 A Well, I mean, the way programmatic advertising works is
11 you're buying an empty box on *The New York Times*. And in
12 the old days, you bought that box regardless of who was
13 reading it. It could be me; it could be you; it could be
14 anyone.

15 But in programmatic advertising, you're buying
16 that box for that specific individual user. And so it takes
17 a lot of mathematical calculation to figure out what is Nike
18 shoes willing to pay to reach you, the individual, in this
19 context? It's a much different problem than how much is it
20 worth to buy, you know, this ad for all users.

21 So that's what programmatic advertising on the
22 internet did that was unique is advertising or buying
23 specific individuals and specific profiles, not generic
24 advertising like you'd see on TV, where you could be reading
25 it and -- or you could be watching it, and so could a

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1 thousand others.

2 Q Would you call that a specific kind of data?

3 A We would call it first-party data or third-party data.

4 Q Sorry?

5 A First- or third-party data, depending on where that
6 information came from. But it's user profile information.
7 It allows you to create -- understand preferences.

8 It's why, if you have a 3-year-old kid, seeing a
9 diaper ad is probably a good thing. If you don't, seeing a
10 diaper ad is not such a good thing. So it gives you the
11 ability to provide relevant information to people, the
12 theory being you're more likely to click on an ad or value
13 an ad if you care about that topic.

14 Q And just so we're clear, why was it that Rubicon didn't
15 have access to that information before header bidding?

16 A Well, the way it was set up before is it was configured
17 in the ad server in this thing called the line item. So
18 inside of the ad server there's a hierarchical sequence that
19 says first call this person, then call this person, then
20 call that person.

21 And that is determined by ad server placement that
22 was largely controlled within the ad server. And there were
23 specific rules in Google's ad server that decided who could
24 get called when. And we didn't want that. We wanted to see
25 all the inventory and bid on all of the impressions, which

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1 is why Prebid and header bidding started to happen to open
2 up and democratize access to publisher inventory, especially
3 the most valuable publisher inventory.

4 THE COURT: Okay. Now, it is 6:00, and we have a
5 couple of housekeeping matters to address. So we have to
6 stop this.

7 So, Mr. Kershaw, we need you back here tomorrow
8 morning. We're going to put you on first. And we're
9 starting tomorrow morning at 9:30 because I have other
10 matters I need to address. But you're free to leave at this
11 time. Please be back here at 9:30. We're going to give you
12 a little badge. Make sure you have that with you because
13 that will get you through the line a bit faster. All right?

14 THE WITNESS: Thank you, Your Honor.

15 THE COURT: All right. In terms of the
16 housekeeping matters, number one, I do want to read the
17 exhibits into the record that we introduced today.

18 But there's another matter. I don't think I need
19 counsel. But just so you know, we had a motion filed by the
20 media today, a motion on behalf of Bloomberg, *The New York*
21 *Times*, and *The Washington Post*, requesting that they be
22 heard tomorrow morning on the need for advance notice to the
23 media before closing the courtroom for sealed proceedings in
24 the above-captioned case.

25 I mean, yesterday, you know, we had the problem

1 arise. So what they want is -- and I'll put the burden -- I
2 am going to grant that request so we don't have this same
3 problem arise in the future.

4 I don't know whether they'll come in tomorrow
5 morning or 8:30 or this will get the word out to them. I'll
6 do an order tonight, but it may not be able to get out
7 tonight.

8 If -- you both know what exhibits you're planning
9 to use tomorrow with whatever witnesses are on the list. If
10 you believe that there is going to be an issue with the
11 sealing matters, I want to know about that now. Do you
12 think there are going to be any issues that are going to
13 arise tomorrow given the nature of the witnesses that you
14 should know are on deck?

15 MS. WOOD: Your Honor, I do not believe that will
16 be an issue for the plaintiffs.

17 THE COURT: All right. Well, it arose, actually,
18 during cross-examination.

19 So all right. Ms. Rhee?

20 MS. RHEE: Yeah. I was just going to say --
21 wanted to have confirmation about who the witnesses are
22 tomorrow.

23 With respect to Mr. Boland, we will quickly confer
24 to confirm that there's going to be no confidential
25 information.

1 MS. WOOD: At least with respect to the direct
2 exam of the United States, Mr. Boland -- there is
3 confidential information. It's been redacted, and we'll be
4 able to manage the exam without needing to close the
5 courtroom because we'll do what we've done elsewhere where
6 we just ask the Court and the witness to look at something
7 and it's not otherwise displayed --

8 THE COURT: All right.

9 MS. WOOD: -- if I'm understanding you correctly.
10 So I don't -- to the extent -- there will be no need, as far
11 as I anticipate, for direct examination to close the
12 courtroom for Mr. Boland.

13 THE COURT: All right.

14 What about from -- Ms. Rhee?

15 MS. RHEE: I just need to be able to
16 double-confirm with my colleagues, Your Honor, because there
17 are, again, third-party witnesses tomorrow. But I think,
18 consistent with what happened today, we should be able to
19 work it out.

20 THE COURT: Well, you're going to have to because
21 we're not going to seal the courtroom tomorrow. All right?

22 MS. RHEE: And we understand that, Your Honor.
23 But I just needed an opportunity to confer because we just
24 wanted confirmation about what the schedule was tomorrow.

25 THE COURT: All right. The attorney who filed

1 this, Mr. Mills, happens to already be on my docket. Maybe
2 that's why he raised the motion. So he is going to be in
3 court tomorrow morning at 8:30. Any of you who want to be
4 there are welcome, but you don't have to be because I think
5 I've resolved it. All right?

6 So that's the first housekeeping matter.

7 The second housekeeping matter is I looked during
8 the lunch break at the litigation holds. I do agree that
9 the amount of detail that's in those holds -- first of all,
10 I can assure the government, they were very thorough. They
11 said everything, everything, everything needs to be turned
12 over. I think it would get into attorney-client
13 communications such that they are entitled to be redacted at
14 this point.

15 All right?

16 MS. WOOD: May I make one statement, Your Honor?
17 And I'm happy to submit a brief if that would be helpful to
18 Your Honor's decision.

19 But my understanding is there is precedent. I can
20 cite some District of Delaware cases as well as some
21 District of New Jersey cases.

22 But the District of Delaware case from 2012 notes
23 a, quote, growing trend among courts to find the
24 attorney-client privilege is lost when spoliation has
25 occurred.

1 And so I would just -- I'm not sure these are even
2 attorney-client privilege as opposed to work product, which
3 is what I understood to be claimed.

4 But even if they were attorney-client, I think,
5 given the evidence that we have shown in this case, we
6 believe that we're entitled to see the unredacted litigation
7 holds.

8 I would also remind the Court that, when we were
9 litigating the sanctions motion or the motion for an adverse
10 inference, there was material revision to testimony that had
11 been given to us in response to a 30(b)(6) notice, where
12 literally 60 or more custodians lit hold information had to
13 be revised. That, again, makes us wary of simply trusting
14 the defendant and their records about when people received
15 notices about what.

16 So given that and given the case law, we would be
17 happy to submit further briefing on this. We do believe
18 that -- not seeking a waiver of the entire privilege across
19 the entire case, but the waiver with respect to the
20 litigation hold materials we do seek, Your Honor.

21 THE COURT: All right. Well, I'm not going to
22 hear extensive argument on this issue now. Frankly, I don't
23 need to resolve it at this point. I'll give you an
24 opportunity to brief it, and then Google can file a
25 response. But at this point, I'm not requiring them to be

1 turned over. All right.

2 MS. WOOD: Thank you.

3 THE COURT: All right. That was the second
4 housekeeping matter.

5 The third one, then, is let's read into the record
6 those exhibits that we believe have been entered.

7 And, again, the protocol has been any
8 demonstrative that was discussed during the trial, that gets
9 published. All right. So each side that used
10 demonstratives, make sure they are properly published before
11 10:00 tomorrow. And then we've made crystal clear as to the
12 redactions. So the burden is on you all to do that
13 correctly.

14 And so listen to what my courtroom deputy has on
15 this.

16 MS. WOOD: And, Your Honor, just one
17 clarification. I believe on September 10, which was day 2
18 of the trial, we didn't read in the certain exhibits
19 concerning the Lipkovitz deposition. I'm happy to read them
20 now.

21 I think we just -- for that one particular day, we
22 deferred the read-in at least with respect to those. We did
23 the read-in first of what had already previously been
24 entered for the rest of the day, and then I read in some
25 additional ones for Mr. Lipkovitz. So we didn't have a

1 second read-in of that, if that makes sense.

2 So I'm happy to do that now or submit something in
3 writing, whatever would be --

4 THE COURT: But they're all up on the website?

5 MS. WOOD: Yes, they're all up on the website.

6 MS. SESSIONS: We don't have the list on hand for
7 the Lipkovitz deposition. So it sounds like this is maybe
8 something we should resolve tomorrow so that we can make
9 sure.

10 THE COURT: Just send it to us. Okay?

11 MS. WOOD: Of course.

12 THE COURT: That's fine. All right.

13 THE COURTROOM DEPUTY: PTX 426, PTX 469, PTX 534,
14 PTX 609, PTX 611, PTX 625, PTX 698, PTX 699, PTX 715, PTX
15 1853, PTX 1854, PTX 751, PTX 748, PTX 762, PTX 784, PTX 763,
16 PTX 768, PTX 819, PTX 884, PTX 850, DTX 701, DTX 829, DTX
17 319 with the redactions, DTX 1484, PTX 36, PTX 1677, PTX
18 1621, PTX 65 under seal, only pages 39 and 40.

19 That's all.

20 THE COURT: Is that consistent with what your
21 records are showing?

22 MS. WOOD: I believe it is, Your Honor. We'll let
23 you know in the morning if it's not, but I believe it is.

24 MS. SESSIONS: It's consistent with ours, and then
25 we had three demonstratives with Mr. Goel as well.

1 THE COURT: All right. You will have those on the
2 web.

3 Okay. Now, we do have other matters. So you
4 don't have to remove the boxes, but you are going to have to
5 clear your tables before tomorrow for tomorrow morning. All
6 right?

7 And you all don't have to be back here until 9:30
8 unless you want to see what we're going to do. I'm probably
9 going to call the media motion first just to put it on the
10 record.

11 MS. WOOD: That will be at 8:30, Your Honor?

12 THE COURT: 8:30. We'll recess court until
13 tomorrow.

14 (Proceedings adjourned at 6:10 p.m.)

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22 I certify that the foregoing is a true and
23 accurate transcription of my stenographic notes.

24

25

/s/
Rhonda F. Montgomery, CCR, RPR